

# **MINI-SENTINEL DISTRIBUTED DATABASE**

## **SUMMARY REPORT**

**YEAR FIVE**

**September 2013 – September 2014**

**Version 1.0**

**Prepared by Mini-Sentinel Data Core**

**October 2015**

Mini-Sentinel is a pilot project sponsored by the [U.S. Food and Drug Administration \(FDA\)](#) to inform and facilitate development of a fully operational active surveillance system, the Sentinel System, for monitoring the safety of FDA-regulated medical products. Mini-Sentinel is one piece of the [Sentinel Initiative](#), a multi-faceted effort by the FDA to develop a national electronic system that will complement existing methods of safety surveillance. Mini-Sentinel Collaborators include Data and Academic Partners that provide access to health care data and ongoing scientific, technical, methodological, and organizational expertise. The Mini-Sentinel Coordinating Center is funded by the FDA through the Department of Health and Human Services (HHS) Contract number HHSF223200910006I.

## TABLE OF CONTENTS

<b>OVERVIEW</b> .....	<b>1</b>
<b>GLOSSARY</b> .....	<b>3</b>
<b>APPENDIX A: ENROLLMENT TABLES AND FIGURES</b>	
TABLE 1. SNAPSHOT OF THE MSDD ENROLLMENT TABLE	
FIGURE 1. NUMBER OF ENROLLMENT PERIODS BY COVERAGE TYPE, YEAR, AND CONTRIBUTING DATA PARTNERS	
FIGURE 2. DISTRIBUTION OF COVERAGE TYPE	
FIGURE 3. NUMBER OF ENROLLMENT RECORDS BY LENGTH OF ENROLLMENT AND CONTRIBUTING DATA PARTNERS	
<b>APPENDIX B: DEMOGRAPHIC TABLES AND FIGURES</b>	
TABLE 2. SNAPSHOT OF THE MSDD DEMOGRAPHIC TABLE	
FIGURE 4. DISTRIBUTION OF RACE	
FIGURE 5. DISTRIBUTION OF SEX	
FIGURE 6. DISTRIBUTION OF AGE GROUP	
<b>APPENDIX C: DISPENSING TABLES AND FIGURES</b>	
TABLE 3. SNAPSHOT OF THE MSDD DISPENSING TABLE	
FIGURE 7. AVERAGE NUMBER OF DISPENSINGS PER USER, BY YEAR	
FIGURE 8. DISTRIBUTION OF DAYS SUPPLIED	
<b>APPENDIX D: ENCOUNTER TABLES AND FIGURES</b>	
TABLE 4. SNAPSHOT OF THE MSDD ENCOUNTER TABLE	
FIGURE 9. OVERALL: TOTAL NUMBER OF ENCOUNTERS AND MEAN NUMBER OF ENCOUNTERS PER MEMBER, BY YEAR-MONTH	
<b>APPENDIX E: DEATH TABLES AND FIGURES</b>	
TABLE 5. SNAPSHOT OF THE MSDD DEATH TABLE	
FIGURE 10. DISTRIBUTION OF DEATH RECORDS, BY SOURCE	
FIGURE 11. DISTRIBUTION OF DEATH RECORDS, BY CONFIDENCE	
FIGURE 12. DISTRIBUTION OF RECORDS BY YEAR	
TABLE 6. SNAPSHOT OF THE MSDD CAUSE OF DEATH TABLE	
FIGURE 13. DISTRIBUTION OF CAUSE OF DEATH RECORDS, BY SOURCE	
FIGURE 14. DISTRIBUTION OF CAUSE OF DEATH RECORDS, BY CONFIDENCE	
FIGURE 15. DISTRIBUTION OF CAUSE OF DEATH RECORDS, BY CAUSE TYPE	
<b>APPENDIX F: LABORATORY TEST RESULTS TABLES AND FIGURES</b>	
TABLE 7. OVERVIEW OF ALKALINE PHOSPHATE (ALP) LABORATORY TEST RESULTS	
TABLE 8. OVERVIEW OF ALANINE AMINOTRANSFERASE (ALT) LABORATORY TEST RESULTS	
TABLE 9. OVERVIEW OF ABSOLUTE NEUTROPHIL (ANC) LABORATORY TEST RESULTS	
TABLE 10. OVERVIEW OF TOTAL BILIRUBIN LABORATORY TEST RESULTS	
TABLE 11. OVERVIEW OF TOTAL CREATINE KINASE (CK) LABORATORY TEST RESULTS	
TABLE 12. OVERVIEW OF CREATININE LABORATORY TEST RESULTS	
TABLE 13. OVERVIEW OF GLUCOSE LABORATORY TEST RESULTS	
TABLE 14. OVERVIEW OF GLYCOSYLATED HEMOGLOBIN (HGBA1C) LABORATORY TEST RESULTS	

TABLE 15: OVERVIEW OF HEMOGLOBIN LABORATORY TEST RESULTS

TABLE 16: OVERVIEW OF INTERNATIONAL NORMALIZED RATIO (INR) LABORATORY TEST RESULTS

TABLE 17: OVERVIEW OF LIPASE LABORATORY TEST RESULTS

TABLE 18: OVERVIEW OF PLATELET COUNT LABORATORY TEST RESULTS

TABLE 19: OVERVIEW OF PREGNANCY (QUALITATIVE) LABORATORY TEST RESULTS

TABLE 20: OVERVIEW OF PREGNANCY (QUANTITATIVE) LABORATORY TEST RESULTS

TABLE 21: NUMBER OF MEMBERS WITH LABORATORY TEST RESULTS, BY TEST TYPE AND YEAR

TABLE 22: NUMBER OF LABORATORY TEST RESULTS, BY TEST TYPE AND YEAR

FIGURE 16: NUMBER OF MEMBERS WITH LABORATORY TEST RESULTS, BY TEST TYPE AND YEAR

FIGURE 17: NUMBER OF LABORATORY TEST RESULTS, BY TEST TYPE AND YEAR

#### **APPENDIX G: VITALS TABLES AND FIGURES**

TABLE 23: NUMBER OF UNIQUE MEMBERS AND UNIQUE RECORDS PER MINI-SENTINEL DISTRIBUTED DATABASE TABLE

#### **APPENDIX H: MINI-SENTINEL DISTRIBUTED DATABASE (MSDD) AT A GLANCE**

TABLE 24: MINI-SENTINEL DISTRIBUTED DATABASE AT-A-GLANCE

## OVERVIEW

The *Mini-Sentinel Distributed Database Summary Report* presents a high-level summary of the information available in the Mini-Sentinel Distributed Database (MSDD). To generate the information in this report, the Mini-Sentinel Operations Center (MSOC) developed and distributed programs that Data Partners ran on their local implementation of the Mini-Sentinel Common Data Model (MSCDM). Results from the programs were returned to MSOC for review, aggregation and reporting. The *MSDD Summary Report* represents the data found in the MSDD at the time the programs were executed. The report is updated periodically, and is one of many tools used by MSOC, the Data Partners, and FDA to characterize the data available in the MSDD and assess data quality. The purpose of this report is to provide the FDA and Mini-Sentinel communities a summary of descriptive characteristics of the MSDD at a given point in time. Please refer to the [Mini-Sentinel Common Data Model](#) specifications for more information.

The data presented in this report are current as of October 1, 2014. This report includes data from 18 Mini-Sentinel Data Partners – Aetna, HealthCore, the HMO Research Network (6 sites), Humana, Kaiser Permanente (6 sites), Lovelace Clinic Foundation, OptumInsight, and Vanderbilt.

The *Mini-Sentinel Distributed Database Summary Report* summarizes each data table in the MSDD. A summary of each table and the data presented follows. Please note that the report reflects the MSDD “as-is” and does not account for different data extract windows across the Data Partners, including different start and end dates, and partial data for 2013 and 2014 for some Data Partners. The number of Data Partners by year is noted in the relevant tables.

In Year 5, MSOC made significant improvements to the process of producing characterization reports that guide understanding of the MSDD for MSOC, FDA, and workgroups. In previous years, output tables from data quality review and profiling reports were utilized to calculate estimates for various metrics, resulting in suboptimal levels of accuracy for the more complex metrics. MSOC’s new dedicated reporting program outputs precise characterization of the MSDD. Although the Year 5 report may show a decrease in several metrics compared to Year 4, MSOC is confident that it more accurately represents MSDD.

The **Enrollment Table** contains records for all individuals who were health plan members during the period included in the data extract. It includes one record for each member enrollment period defined by a unique combination of drug and medical coverage flags. The table is used to identify enrollment periods. As of October 1, 2014, the Enrollment Table includes information from January 2000 through June 2014. These enrollment periods reflect 182 million unique person identifiers and represent 333 million person-years of observation time. Sixty-two percent of the enrollment periods in the MSDD include both medical and drug coverage; 32% of periods include only medical coverage (Table 1). The drop in enrollment records in 2014 reflects the number of Data Partners contributing data and lack of complete information for 2014 (Figure 1). The enrollment table is often used to restrict assessment of exposures and outcomes to periods of enrollment.

The **Demographic Table** includes race, sex, ethnicity and age. The table has one record for every unique person in the MSDD. Some Mini-Sentinel Data Partners provide care to individuals who are not health plan members (e.g., in ambulatory clinics and hospitals), and information for these non-members is

included in this table but not in the Enrollment Table. Therefore, everyone in the Enrollment Table should be in the Demographic Table, but not everyone in the Demographic table will be in the Enrollment Table. As of October 1, 2014, race and ethnicity are unknown or frequently missing at most Data Partner sites (Table 2, Figure 4). Sex distribution is approximately equal (Figure 5) and 62% of individuals are between the ages of 22 and 64 (Figure 6).

The **Dispensing Table** represents outpatient pharmacy dispensings captured by the Data Partners. The table has one record per dispensing. The MSCDM requires that the Data Partners process source data to remove rollback (negative) transactions (e.g., restocking of prescription fills that were not picked up) and process other adjustments before populating the table. Infused medications, vaccinations, and injections provided directly by medical providers are captured in the Procedure Table using the appropriate procedure codes. There were 4.4 billion dispensings and 95 million unique persons in the Dispensing Table. The drop in dispensing records in 2014 reflects the number of Data Partners contributing data and lack of complete information for 2014 (Figure 7). Only 2.6% of dispensings were for more than 99 days (Table 3) and the majority of dispensings are for between 34 and 66 days supplied (Figure 8).

Each record in the **Encounter Table** represents a unique health care visit in the ambulatory or inpatient setting (see “Encounter Type” in Glossary). The Encounter Table includes dates of service, provider identifiers, and the setting in which care was provided. There were 5.1 billion encounters and over 141 million unique persons in the encounter file (Table 4). Diagnoses and procedures recorded during encounters are recorded in separate tables.

The **Death Table** records death dates. As of October 1, 2014, there were 3.9 million unique patient identifiers included in the Death Table (Table 5). 81% percent of the deaths recorded were determined using local source systems at Data Partner sites; most of the remaining records used state death files to determine death date (Figure 10). The increase in records in 2008 reflects the number of Data Partners contributing data; the drop in records in 2013 reflects variation in data availability (data lag) across Data Partners.

The **Cause of Death Table** records diagnosis codes reflecting the conditions that contributed to death. There were over 900 thousand unique patient identifiers in the Cause of Death Table (Table 6). State death files were the source of the information in over 94% of records (Figure 13). The proportion of deaths captured by the Data Partners is unknown. As many Data Partners link to state death registries to update the death status of their members, and these updates are performed infrequently, a two-year data lag in cause of death data is not uncommon.

The death and cause of death tables have not yet been thoroughly reviewed or tested for use within Mini-Sentinel.

The **Laboratory Result Table** contains selected outpatient laboratory test results from twelve Data Partners. Laboratory test results incorporated into the MSCDM to date include: alkaline phosphatase (ALP), alanine aminotransferase (ALT), absolute neutrophil count (ANC), total bilirubin, creatine kinase total, creatine kinase MB fraction, creatine kinase MB to total creatine kinase index, creatinine, fibrin d-dimer, glucose, hemoglobin, glycosylated hemoglobin (HgbA1c), influenza viruses A, B, and A + B, International Normalized Ratio (INR), lipase, pregnancy test, platelet count, troponin I cardiac, and troponin T cardiac. Table 7 through Table 22 provides an overview of laboratory test results by test type

and Data Partner for tests that have been standardized to date. There were over 31 million individuals with at least one of the listed laboratory results (Table 23). The number of results each year for each laboratory test is depicted in Table 21 and Figure 16. Variation in Data Partner source data (e.g., different result units) and in accuracy of data extraction and loading individual tests into the MSCDM (e.g., populating urine glucose into the blood glucose variable) has necessitated characterization and standardization of each laboratory test. Laboratory tests that have been standardized to date include: ALP, ALT, ANC, total bilirubin, creatine kinase total, creatinine, glucose, HGB, HgbA1c, INR, lipase, platelets, and pregnancy tests. However, not all Data Partners had incorporated all standardization requests at the time the data for the tables and figures in this report were compiled.

## GLOSSARY

*Age* - defined as (Refresh Date – Date of Birth).

*Amount Dispensed* - number of units (e.g., pills, tablets, vials, mL, etc.) dispensed.

*Confidence* - all linkages to external data sources have some level of uncertainty, and many linkage algorithms include an assessment of the confidence of the match. Reported as Excellent, Fair or Poor:

- *Death Records* - captures the confidence in the certainty that the member drawn from the source data represents the actual member
- *Cause of Death (COD) Records* - confidence in the accuracy of the COD based on source, match, number of reporting sources, discrepancies, etc.

*Days Supplied* - number of days that the medication supports as reported on the dispensing record.

*Data Partners* – refers to Mini-Sentinel collaborating partners who have created the Mini-Sentinel Distributed Database using their administrative, claims, and electronic health record data. Each Data Partner was assigned a random ID that remains consistent throughout this report.

*Encounter ID* - encounter-level identifier used to link the Encounter, Diagnosis, and Procedure tables.

### *Encounter Type*

- *Inpatient Hospital Stay* - Includes all inpatient stays, same-day hospital discharges, hospital transfers, and acute hospital care where the discharge is after the admission date.
- *Non-Acute Institutional Stay* - Includes hospice, skilled nursing facility (SNF), rehab center, nursing home, residential, overnight non-hospital dialysis, and other non-hospital stays.
- *Emergency Department* - Includes ED encounters that became inpatient stays (in which case inpatient stay would be a separate encounter). Excludes urgent care visits. ED encounters should be identified before hospital stays to insure that ED with subsequent admission won't be incorporated into the hospital event.
- *Ambulatory Visit* - Includes visits at outpatient clinics, same day surgeries, urgent care visits, and other same-day ambulatory hospital encounters, but excludes emergency department encounters.

- *Other Ambulatory Visit* - Includes other non-overnight AV encounters such as hospice visits, home health visits, skilled nursing facility visits, other non-hospital visits, as well as telemedicine, telephone, and email consultations.

*Enrollment Period* - defined as Enrollment End Date – Enrollment Start Date. A member may have multiple enrollment periods. Changes in drug or medical coverage status will result in a new enrollment period.

*Hispanic* - identifies a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race (defined by Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity from the Office of Management and Budget (OMB), [http://www.whitehouse.gov/omb/fedreg\\_1997standards](http://www.whitehouse.gov/omb/fedreg_1997standards)).

*Patient ID (PatID)* – a pseudointentifier with a consistent crosswalk to the true identifier retained by the source Data Partner. For analytical data sets requiring patient-level data, only the pseudointentifier is used to link across all information belonging to a patient.

*Race* - definitions for Race are based on the Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity from the Office of Management and Budget (OMB), [http://www.whitehouse.gov/omb/fedreg\\_1997standards](http://www.whitehouse.gov/omb/fedreg_1997standards).

- *American Indian* - a person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.
- *Asian* - a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
- *Black/African American* - a person having origins in any of the black racial groups of Africa.
- *Native Hawaiian or Other Pacific Islander* - a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
- *White* - a person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

*Refresh Date* - the latest date in the Data Partner’s enrollment, dispensing, or utilization tables.

*Sex* - has values of Male, Female, Ambiguous (transgender/hermaphrodite) or Unknown.

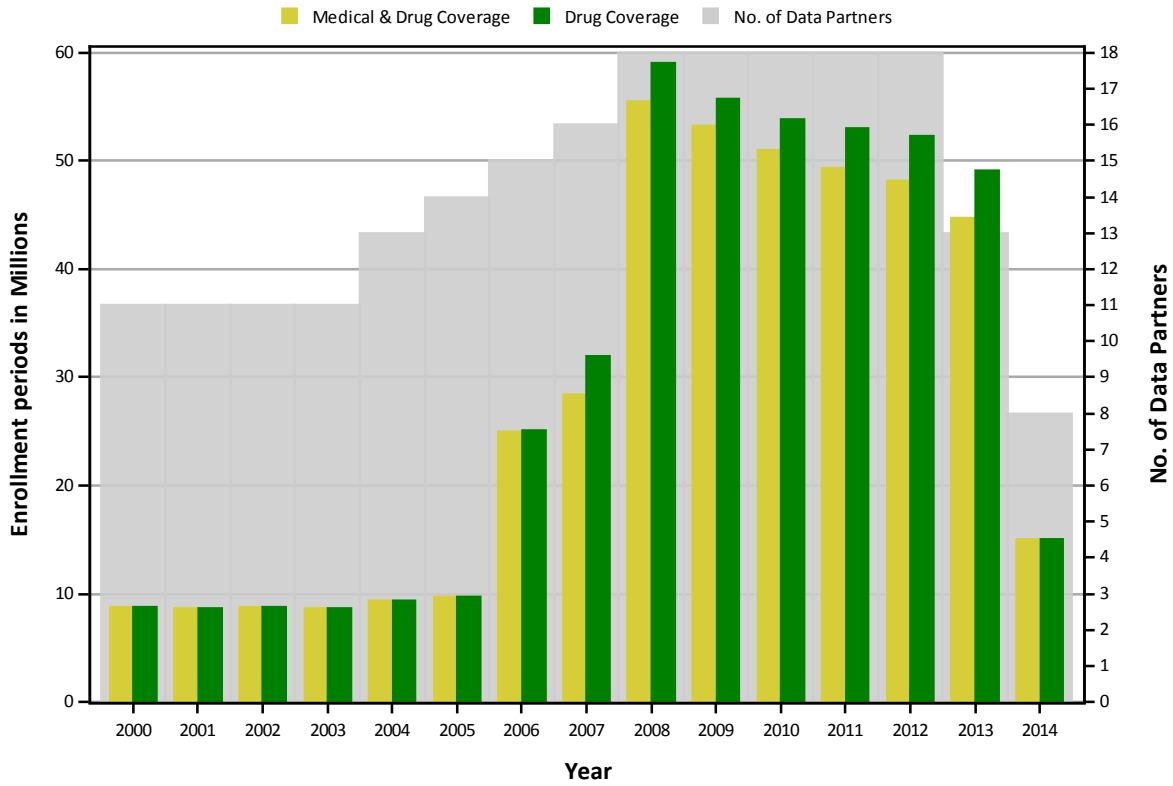
*Source of Death and Cause of Death Records* - source of the mortality information, which can come from state or national records, tumor registries or from locally defined sources.

**Table 1: Snapshot of the Mini-Sentinel Distributed Database Enrollment Table**

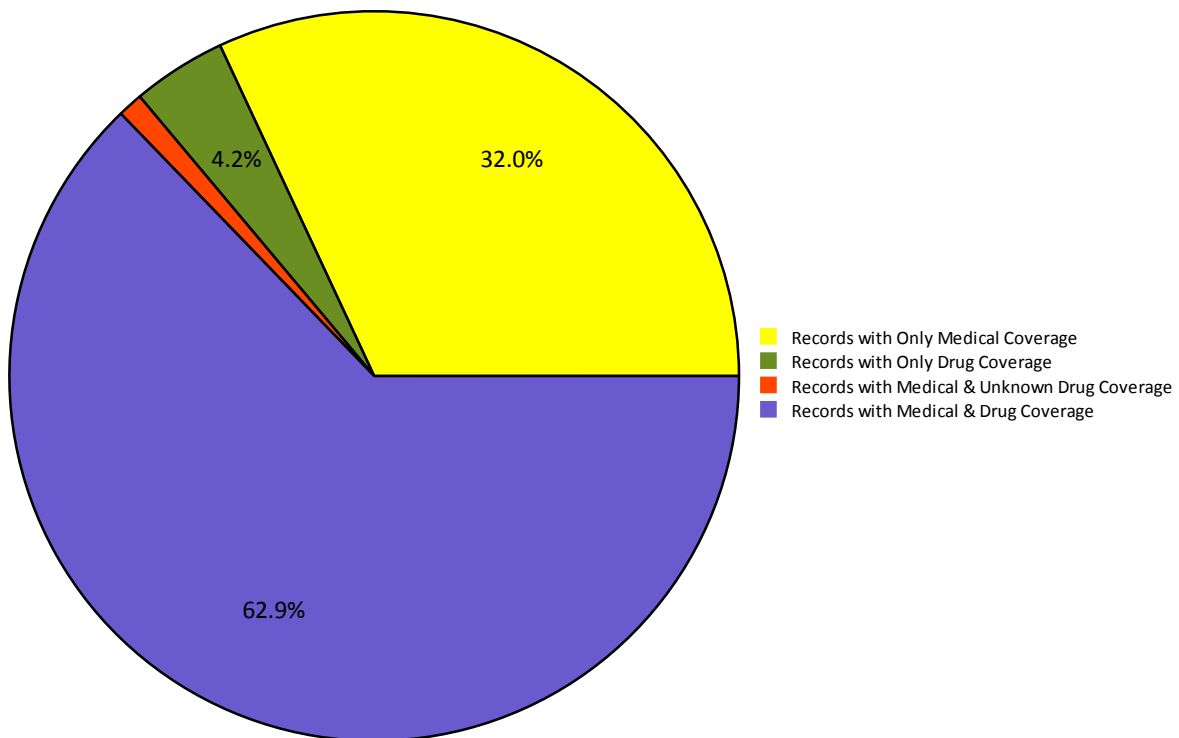
	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Records with medical coverage only (%)	42.9	51.2	3.5	15.2	0.9	3.1	0.3	0.0	4.9	17.2	36.1	12.4	42.5	0.3	40.5	6.3	3.2	10.7	32.0
Records with drug coverage only (%)	0.0	0.0	0.0	0.0	0.0	0.0	49.8	0.0	0.0	0.0	0.0	0.0	0.4	0.0	2.1	0.0	0.0	0.0	4.2
Records with medical and unknown drug coverage (%)	0.0	0.0	0.0	0.0	0.6	0.0	0.0	41.1	11.4	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.9	0.0	1.0
Records with medical and drug coverage (%)	57.1	48.8	96.5	84.8	98.5	96.9	49.9	58.9	83.7	82.8	63.9	87.6	57.1	99.7	57.3	92.8	94.9	89.3	62.9
Enrollment periods per member	1.2	3.5	1.3	1.7	1.2	2.4	1.1	1.6	1.8	1.7	1.7	1.6	1.4	1.2	1.2	3.1	1.5	3.9	1.3
Length of enrollment in medical and drug coverage (months)																			
Statistics																			
Min	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0
P1	1	0	1	1	0	0	0	0	1	1	1	0	0	0	0	1	1	0	0
P5	2	1	1	1	1	0	2	2	2	1	3	2	1	1	1	1	1	1	1
P25	8	6	8	6	10	3	8	10	9	7	14	12	7	6	7	4	6	3	7
Median	15	15	21	18	24	10	17	24	25	20	38	25	17	18	15	9	13	7	17
P75	31	33	53	51	52	21	35	60	67	54	85	54	37	45	33	21	34	12	36
P95	69	78	154	173	132	48	76	96	171	158	132	121	94	126	69	55	93	24	84
P99	69	125	171	174	168	72	76	108	171	171	144	156	97	169	69	102	108	45	156
Max	69	150	171	174	168	120	76	108	171	171	148	156	97	169	69	127	108	156	174
Distribution (%)																			
0 - 6	21.4	26.7	21.8	26.6	18.6	38.8	19.0	17.9	19.6	24.3	10.0	13.4	24.5	25.1	23.2	37.6	27.5	48.0	23.1
7 - 12	22.7	18.9	16.2	15.6	14.5	22.9	23.9	16.8	13.5	15.1	12.7	14.6	17.7	16.3	21.9	24.3	21.8	33.1	19.9
13 - 24	24.4	21.3	17.3	15.8	18.2	17.9	21.8	17.7	16.4	16.2	15.2	21.2	19.8	17.5	22.3	18.7	19.1	14.1	20.8
25 - 36	13.1	11.3	10.3	9.5	12.2	11.5	12.3	10.6	10.3	9.9	11.0	13.9	12.4	10.5	12.0	8.6	8.8	3.3	11.9
37 - 48	6.9	7.0	7.0	6.3	9.8	4.8	7.9	7.6	7.5	7.3	8.7	8.9	7.8	7.6	7.4	4.3	6.2	0.9	7.4
49 - 60	4.1	4.9	5.5	4.7	6.3	1.8	4.7	5.6	5.3	4.9	6.5	6.2	5.1	4.7	4.5	2.3	4.3	0.3	4.7
61 - 72	7.3	3.6	4.0	3.4	5.2	1.6	3.4	3.8	4.3	3.7	5.4	8.1	3.6	3.5	8.7	1.5	3.1	0.1	5.5
73 - 84	0.0	2.2	2.9	2.8	3.3	0.2	7.0	3.2	3.5	3.1	5.3	2.8	2.6	2.8	0.0	0.8	2.5	0.1	1.8
85 - 96	0.0	1.2	2.6	2.1	2.5	0.2	0.0	13.0	2.9	2.4	3.8	2.2	2.6	2.2	0.0	0.6	2.3	0.0	1.4
97 - 108	0.0	0.8	2.2	1.8	1.7	0.1	0.0	3.9	2.4	2.2	3.9	1.8	3.8	1.8	0.0	0.4	4.4	0.0	1.6
109 - 120	0.0	0.7	1.7	1.5	1.5	0.1	0.0	0.0	2.0	1.9	3.0	1.9	0.0	2.5	0.0	0.2	0.0	0.0	0.4
121 & Up	0.0	1.3	8.6	9.8	6.0	0.0	0.0	0.0	12.3	9.1	14.4	5.1	0.0	5.4	0.0	0.6	0.0	0.0	1.7



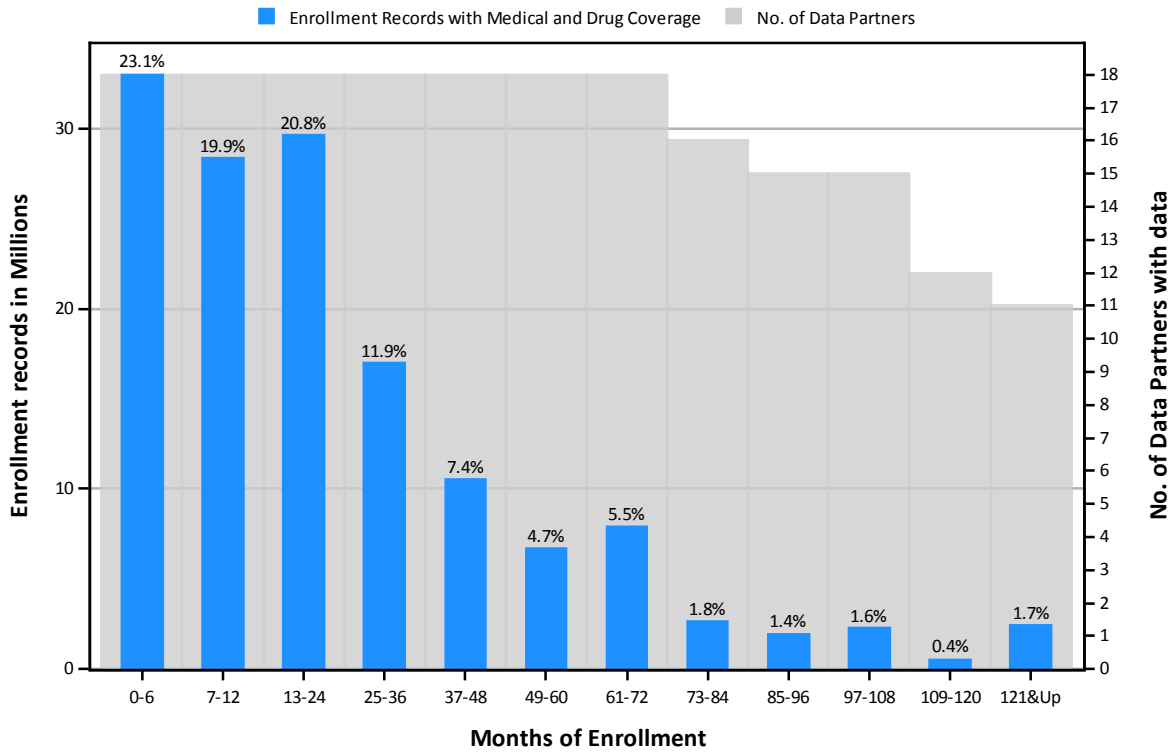
**Figure 1: Number of Enrollment Periods Initiated by Coverage Type, Year, and Number of Contributing Data Partners**



**Figure 2: Distribution of Coverage Type**



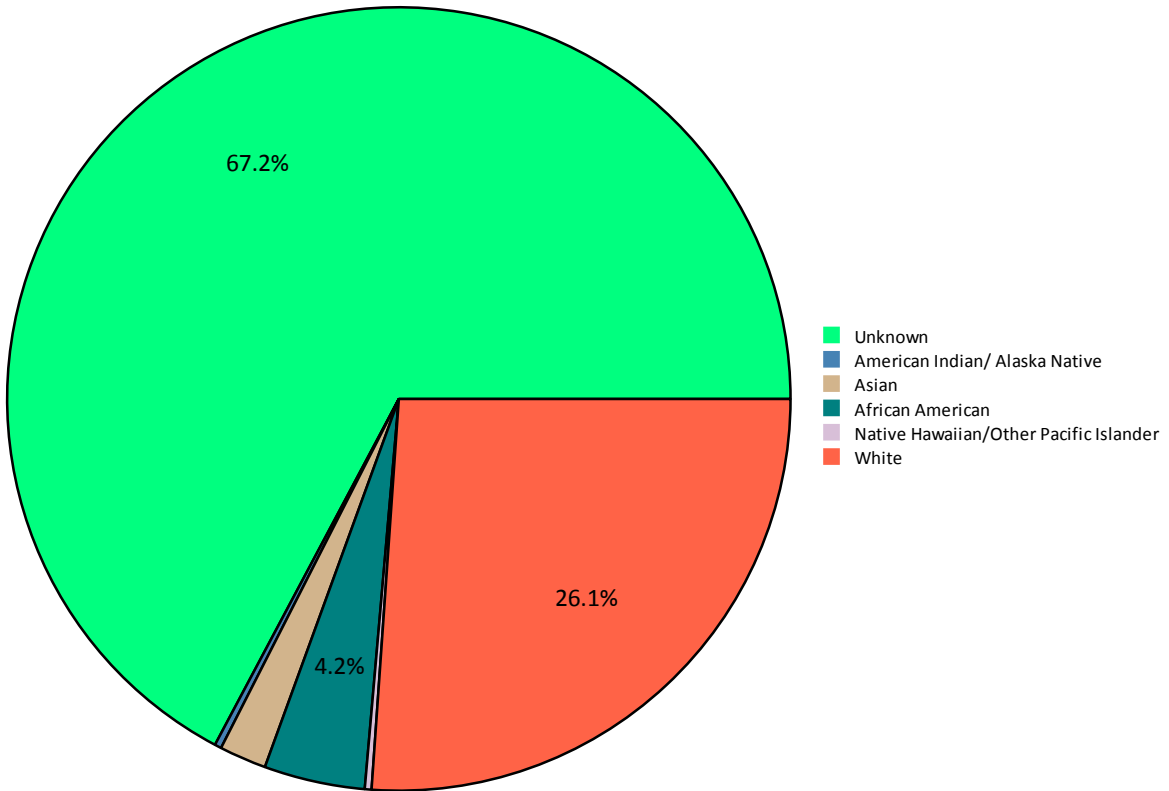
**Figure 3: Number of Enrollment Records by Length of Enrollment and Number of Contributing Data Partners**  
 (Total number of records = 142,841,279)



**Table 2: Snapshot of the Mini-Sentinel Distributed Database Demographic Table**

	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Race (%)																			
Unknown	74.3	46.1	64.2	46.8	70.9	92.8	32.2	66.7	41.6	49.5	10.5	8.2	100	71.9	43.2	61.0	100	89.3	67.2
American Indian / Alaska Native	0.2	0.4	0.5	0.9	0.2	0.0	0.4	0.3	0.4	0.8	0.5	0.2	0.0	0.2	0.2	0.8	0.0	0.0	0.2
Asian	1.6	0.7	1.5	19.2	1.6	0.0	1.4	3.7	11.8	3.3	3.2	1.4	0.0	1.8	3.1	4.1	0.0	0.5	2.0
African American	2.7	0.4	2.3	0.8	3.4	0.0	8.3	15.5	5.9	1.9	32.5	25.4	0.0	13.8	6.9	2.3	0.0	0.8	4.2
Native Hawaiian / Other Pacific Islander	0.1	0.1	0.1	16.8	0.0	0.0	1.9	0.2	0.6	0.4	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.3
White	21.0	52.3	31.3	15.5	23.8	7.2	55.8	13.6	39.8	44.1	53.2	64.8	0.0	12.3	46.7	31.2	0.0	9.4	26.1
Sex (%)																			
Male	48.8	47.3	48.7	51.4	49.2	47.3	45.0	48.1	50.0	49.1	45.7	43.4	49.9	48.0	49.6	47.0	42.1	48.4	48.9
Female	51.2	52.7	51.3	48.6	50.8	49.6	55.0	51.9	50.0	50.9	54.3	56.6	50.1	52.0	50.4	53.0	50.6	51.6	51.1
Ambiguous	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unknown	0.0	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.3	0.0	0.0
Hispanic (%)																			
Yes	2.9	1.2	6.7	3.9	0.6	0.0	2.2	4.2	14.7	3.9	1.1	5.2	0.0	1.8	7.5	2.2	43.6	0.5	3.7
No	0.7	53.0	34.4	51.1	0.0	0.0	67.8	11.7	0.0	19.8	23.4	91.8	0.0	0.0	56.8	38.0	56.4	10.8	23.8
Unknown	96.4	45.8	58.9	45.0	99.4	100	30.1	84.1	85.3	76.3	75.5	3.0	100	98.2	35.7	59.7	0.0	88.7	72.4
Age																			
Statistics																			
Mean	36.8	41.8	40.0	40.7	37.4	42.5	61.0	38.8	40.6	39.9	43.7	33.5	38.7	37.7	36.5	41.0	34.7	39.9	39.7
StdDeviation	20.3	25.0	21.5	20.7	20.7	22.3	22.3	20.4	22.1	21.5	21.5	25.1	21.0	19.6	20.3	21.2	23.3	20.3	--
Min	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	-1	-1
Max	118	117	123	119	144	126	113	125	128	120	112	198	114	114	213	120	113	132	213
Distribution (%)																			
0 - 1 yrs	1.0	1.4	1.0	0.8	1.1	0.5	0.2	0.9	1.0	0.9	0.3	3.0	0.9	1.0	1.3	0.6	1.8	0.7	1.0
2 - 4 yrs	2.5	2.8	2.0	1.6	2.5	1.3	0.6	2.0	2.0	1.9	0.7	5.3	2.1	2.1	2.9	1.7	4.0	1.6	2.3
5 - 9 yrs	5.7	5.5	4.6	3.7	5.6	4.1	1.7	4.9	4.5	4.4	2.4	9.6	5.5	4.6	6.3	4.2	9.7	4.2	5.4
10 - 14 yrs	5.9	6.5	6.0	4.8	6.7	5.3	1.9	5.5	5.6	5.9	5.0	9.7	6.1	6.3	6.5	5.0	9.1	6.0	5.8
15 - 18 yrs	5.1	5.2	5.0	4.0	5.5	4.7	1.6	4.7	4.9	5.3	5.3	7.0	5.0	5.5	5.2	4.4	6.4	5.2	4.8
19 - 21 yrs	4.8	4.1	3.7	3.4	4.1	3.8	1.3	3.8	3.8	3.9	4.6	5.4	4.1	4.2	4.1	3.9	4.9	4.0	4.0
22 - 44 yrs	39.4	30.0	36.6	41.2	36.7	31.9	15.6	38.7	36.9	37.5	33.4	30.3	36.4	39.2	37.6	37.1	30.5	35.8	35.4
45 - 64 yrs	26.2	24.4	27.6	27.1	28.2	29.5	20.0	27.8	26.1	26.3	31.1	15.4	28.2	28.3	27.8	28.8	20.8	30.8	26.6
65 - 74 yrs	5.8	8.3	7.5	7.4	6.0	7.3	27.3	7.5	7.6	7.9	8.3	5.6	7.2	5.7	5.1	8.7	6.9	7.6	8.1
75 + yrs	3.7	11.9	6.0	5.9	3.6	8.6	29.8	4.1	7.5	6.0	9.1	8.6	4.5	3.2	3.2	5.6	6.0	4.2	6.5
Unknown	0.0	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Figure 4: Distribution of Race in the Demographic Table**



**Figure 5: Distribution of Sex in the Demographic Table**

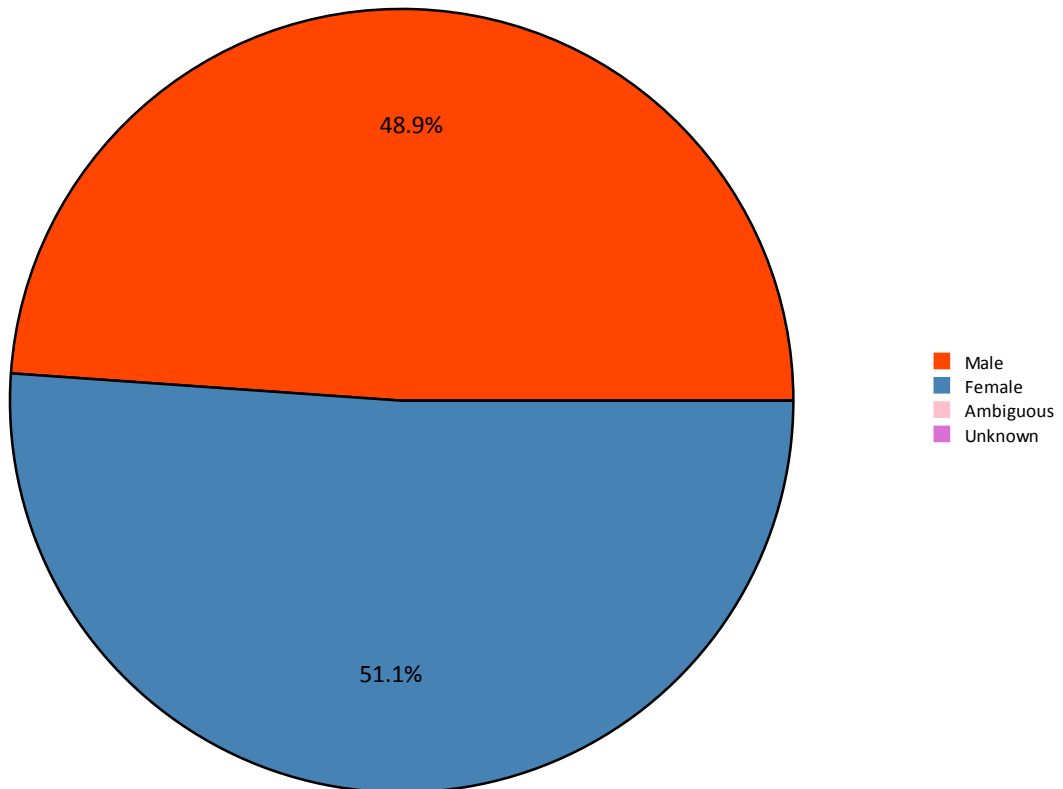
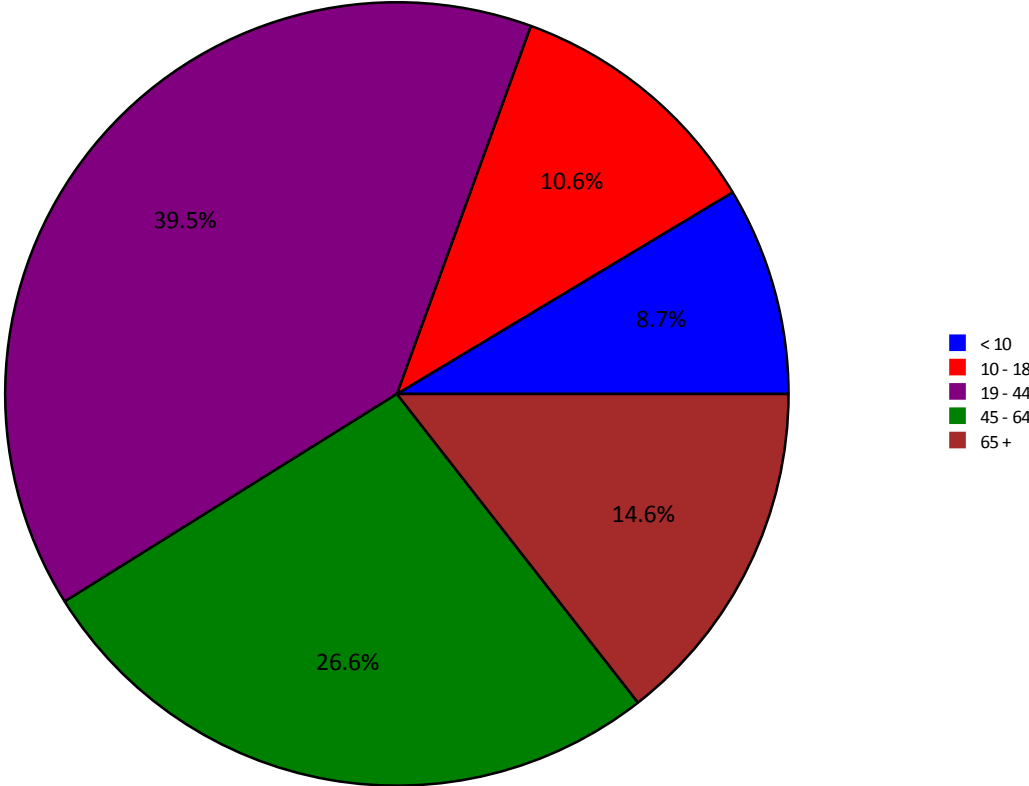


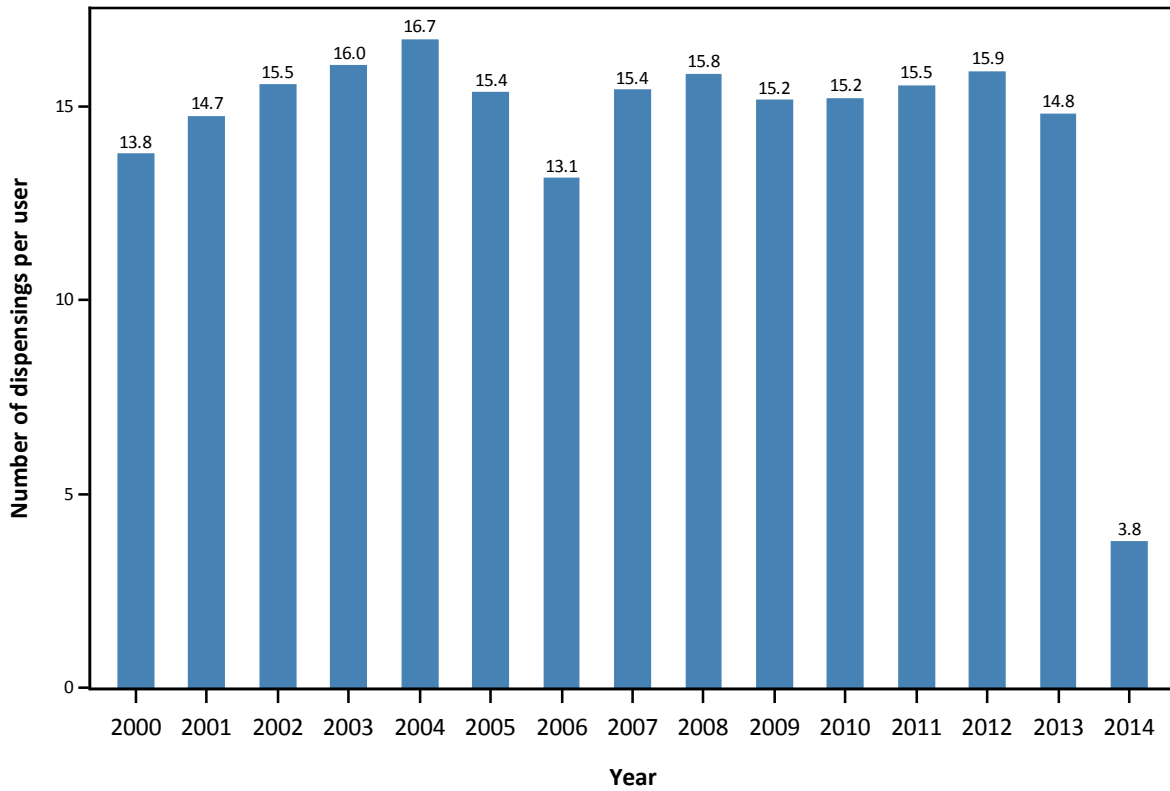
Figure 6: Distribution of Age Group in the Demographic Table



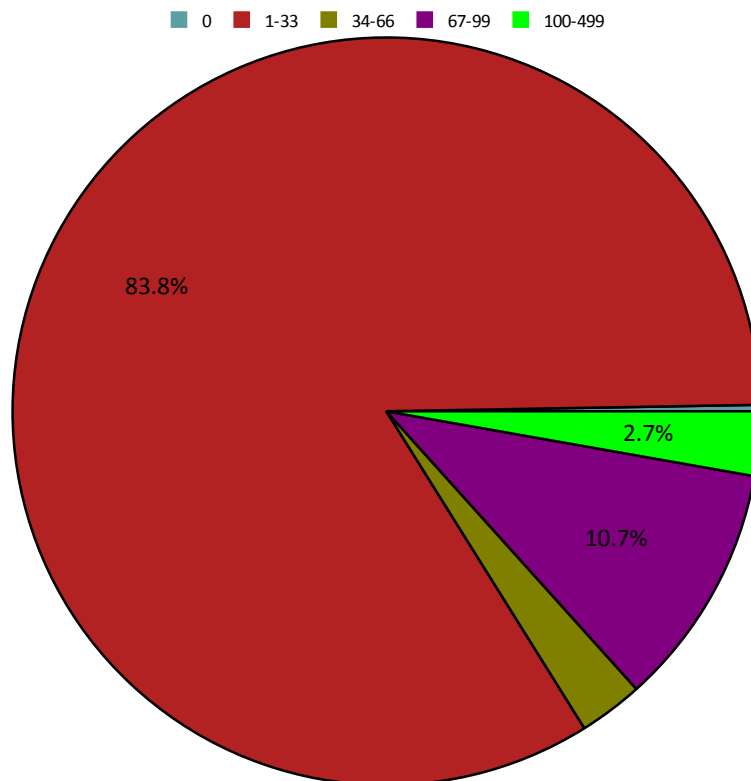
**Table 3: Snapshot of the Mini-Sentinel Distributed Database Dispensing Table**

	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Dispensings per Year																			
2000	--	12.0	10.9	10.2	10.7	12.0	--	--	10.1	11.8	13.3	27.3	--	10.0	--	--	--	11.3	13.8
2001	--	12.5	11.8	10.4	11.1	12.0	--	--	10.2	13.2	14.3	29.3	--	10.7	--	--	--	12.3	14.7
2002	--	13.1	12.0	10.9	11.6	14.7	--	--	10.2	13.6	14.9	31.9	--	11.3	--	--	--	12.9	15.5
2003	--	12.6	12.1	11.0	11.9	14.9	--	--	10.2	13.4	15.4	34.7	--	11.0	--	--	--	12.6	16.0
2004	--	13.4	12.3	11.1	12.2	14.6	--	--	10.2	13.6	15.9	38.0	--	11.1	--	14.6	8.8	13.2	16.7
2005	--	13.4	12.2	11.0	12.5	14.4	--	11.0	10.3	13.5	16.0	32.2	--	10.8	--	14.7	13.8	13.3	15.4
2006	--	13.5	12.7	11.0	12.8	16.8	--	11.2	10.3	13.9	17.1	15.6	13.5	11.4	--	15.2	14.4	13.9	13.1
2007	--	14.7	12.9	11.1	13.2	17.2	21.4	11.7	10.4	14.2	18.0	16.0	14.0	11.5	--	15.5	15.7	13.4	15.4
2008	12.2	14.7	13.2	10.9	13.1	17.0	32.8	11.3	10.5	14.3	18.5	16.0	14.2	11.4	12.1	15.4	15.9	13.6	15.8
2009	12.3	15.4	13.3	10.8	13.0	14.2	31.1	11.7	10.6	14.3	19.0	14.7	14.3	11.5	12.2	15.2	15.9	13.6	15.2
2010	12.4	15.4	13.3	10.7	12.7	16.7	29.3	11.7	10.7	14.2	17.6	14.2	14.7	11.5	12.3	14.7	16.4	13.8	15.2
2011	12.4	15.4	13.1	10.6	12.3	17.1	29.2	11.3	10.6	13.8	18.6	14.1	15.0	11.4	12.3	14.6	16.4	13.7	15.5
2012	12.7	9.2	13.1	10.5	12.1	10.6	29.2	11.3	10.7	13.9	7.7	14.4	15.3	11.8	12.4	14.8	16.0	13.9	15.9
2013	10.7	--	12.9	10.3	12.1	--	26.5	4.2	10.9	13.8	--	--	15.1	11.7	10.1	14.7	9.1	--	14.8
2014	0.0	--	4.6	6.7	--	--	0.0	0.0	4.1	5.1	--	--	--	2.9	--	8.5	--	--	3.8
Distribution of Days Supplied (%)																			
Missing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.5	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2
1	0.8	1.2	1.3	0.9	1.1	0.8	0.7	1.3	1.3	1.8	0.9	1.2	1.1	1.1	0.8	1.6	1.1	1.0	1.0
2-10	17.1	16.5	13.4	21.9	17.7	12.3	9.9	16.6	16.3	14.8	14.3	21.4	16.3	17.5	18.4	16.1	17.6	16.0	15.5
11-20	5.5	6.4	4.2	5.7	6.6	5.3	4.8	8.3	8.2	4.3	7.7	8.3	5.4	4.3	5.7	5.4	6.3	6.2	5.8
21-33	64.2	56.1	33.0	41.4	54.2	62.4	68.2	30.4	25.3	47.1	49.0	66.6	67.1	59.2	65.5	47.9	66.7	68.9	61.6
34-66	0.8	4.4	33.3	4.5	3.4	8.4	1.7	16.0	10.5	4.0	11.3	0.1	1.1	4.0	0.7	4.6	1.4	0.8	2.7
67-99	11.6	13.9	13.9	24.9	16.7	7.8	14.6	26.2	6.6	26.1	11.2	0.2	8.9	13.6	8.8	23.4	6.9	7.3	10.7
100-132	0.0	1.5	0.8	0.6	0.3	0.9	0.0	0.1	31.6	1.2	5.5	0.0	0.1	0.1	0.1	0.9	0.0	0.0	2.6
133-499	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.1	0.3	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
500+	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Distribution of Amount Supplied (%)																			
Missing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
<0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1
>0-40	65.7	58.1	39.6	48.6	55.9	56.6	61.0	44.5	34.5	43.9	51.1	63.3	67.5	57.4	67.6	55.0	61.6	66.9	61.1
>40-100	26.7	32.5	42.1	36.9	34.2	31.0	31.1	40.4	48.4	40.3	39.3	26.9	25.5	33.0	25.2	33.0	28.6	25.6	29.9
>100-999	7.5	9.2	17.9	14.2	9.7	12.0	7.7	14.0	16.8	15.7	7.1	8.3	6.9	9.4	7.0	11.8	9.6	7.3	8.6
>=1000	0.1	0.1	0.4	0.3	0.2	0.4	0.2	0.3	0.3	0.1	0.2	0.2	0.1	0.3	0.1	0.1	0.2	0.2	0.2

**Figure 7: Average Number of Dispensings per User in the MSDD Dispensing Table by Year**



**Figure 8: Distribution of Days Supplied in the MSDD Dispensing Table**

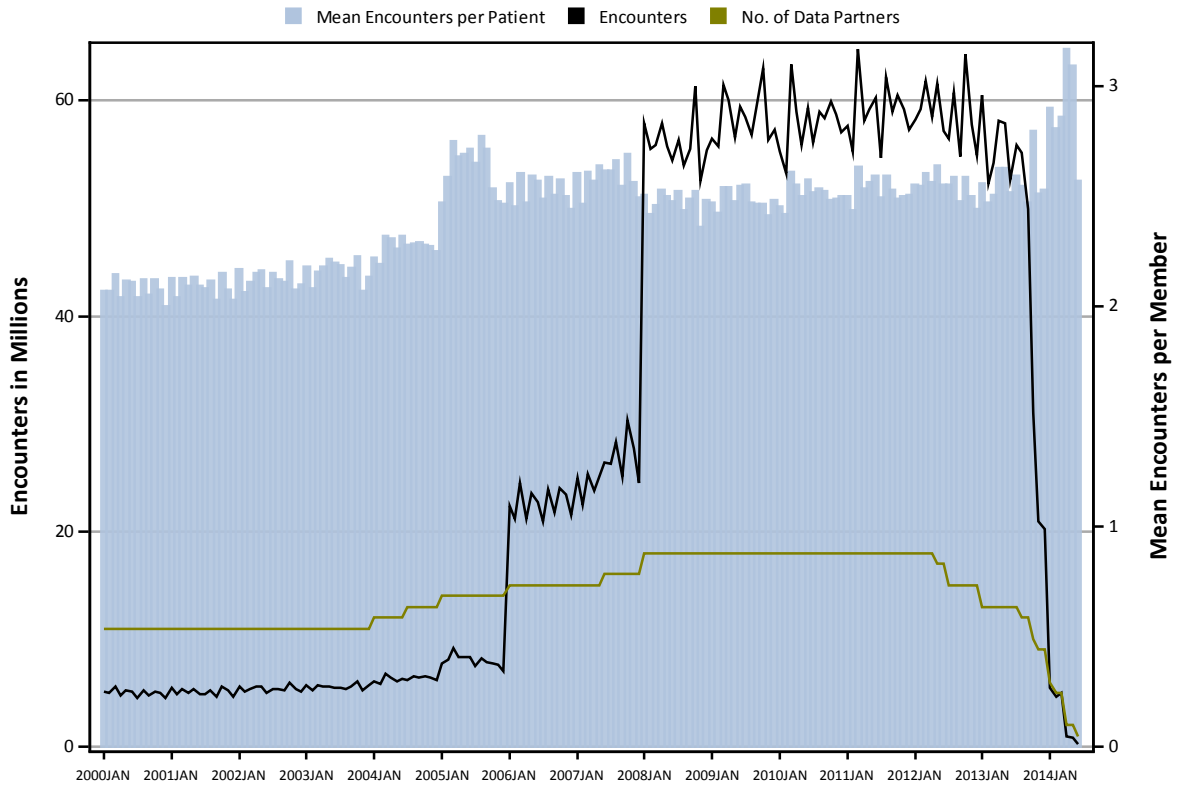


**Table 4: Snapshot of the Mini-Sentinel Distributed Database Encounter Table**

	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Encounters per Member by Year																			
2000	--	10.0	5.8	7.5	7.6	11.2	--	--	7.6	11.8	9.3	8.2	--	6.6	--	--	--	8.8	8.2
2001	--	10.3	6.6	7.4	7.7	9.9	--	--	7.7	12.1	9.5	8.3	--	6.8	--	--	--	9.3	8.3
2002	--	10.5	7.2	7.6	7.9	10.7	--	--	7.8	13.3	9.6	8.7	--	7.1	--	--	--	9.7	8.7
2003	--	10.8	7.2	7.6	8.2	10.2	--	--	8.0	13.6	9.6	9.2	--	7.3	--	--	--	9.8	8.9
2004	--	10.9	6.9	11.9	8.4	11.4	--	--	8.0	13.8	9.6	9.5	--	8.3	--	12.6	5.5	10.0	9.3
2005	--	11.2	9.6	12.2	8.7	13.9	--	12.1	12.3	13.9	9.8	7.7	--	9.1	--	13.6	8.5	10.2	10.8
2006	--	12.8	9.8	11.3	8.9	11.6	--	13.2	11.1	14.1	10.2	8.5	10.8	8.9	--	14.1	8.9	10.6	10.7
2007	--	13.5	10.7	10.1	9.2	12.7	9.5	14.4	11.1	15.1	10.3	8.7	11.1	9.2	--	14.6	9.2	10.2	10.9
2008	9.2	13.9	11.3	10.6	9.3	14.0	14.4	15.1	10.8	15.6	10.5	8.9	11.3	9.3	10.8	14.8	9.4	10.5	10.7
2009	9.3	12.6	11.8	11.2	9.6	12.3	16.4	16.0	10.5	16.4	10.6	9.3	11.6	10.5	11.1	15.2	10.0	10.9	11.0
2010	9.3	12.5	12.2	11.3	9.5	15.6	17.6	16.2	10.3	16.0	10.6	9.0	11.6	13.7	10.9	15.0	9.6	10.8	11.0
2011	9.3	12.4	12.8	11.6	9.6	17.8	18.5	16.6	10.2	16.6	10.6	9.3	11.5	14.4	11.0	15.5	9.5	10.7	11.1
2012	9.4	7.7	13.2	12.0	9.6	8.6	19.1	17.9	10.3	16.9	5.4	12.3	11.1	14.9	11.0	15.8	9.9	11.1	11.2
2013	7.2	--	13.7	11.7	9.5	--	16.9	18.4	10.4	17.1	--	--	10.8	15.2	8.9	15.7	5.9	--	9.9
2014	0.0	--	6.1	7.6	--	--	0.0	2.6	4.5	6.7	--	--	--	0.0	--	9.3	--	--	3.5
Encounter Type (%)																			
Inpatient Hospital Stay	0.8	1.2	0.8	0.9	1.1	0.8	1.1	2.4	1.0	0.6	0.8	4.0	0.9	0.7	0.7	0.5	1.3	0.8	1.0
Non-Acute Institutional Stay	0.1	0.0	0.1	1.4	0.1	0.8	1.6	0.3	0.1	0.1	0.0	0.4	1.1	0.0	0.1	0.2	0.6	0.2	0.5
Emergency Department	2.7	3.4	1.9	2.0	2.0	1.1	1.5	1.2	2.7	1.5	6.5	12.7	3.4	1.5	2.3	1.9	4.1	2.6	3.1
Ambulatory Visit	91.5	69.8	46.5	56.8	95.0	73.5	80.1	39.4	62.8	42.7	91.8	82.9	77.8	48.7	84.1	53.4	72.3	78.6	78.6
Other Ambulatory Visit	4.8	25.6	50.8	38.8	1.9	23.8	15.7	56.7	33.4	55.1	0.9	0.0	16.7	49.1	12.7	44.0	21.8	17.8	16.8



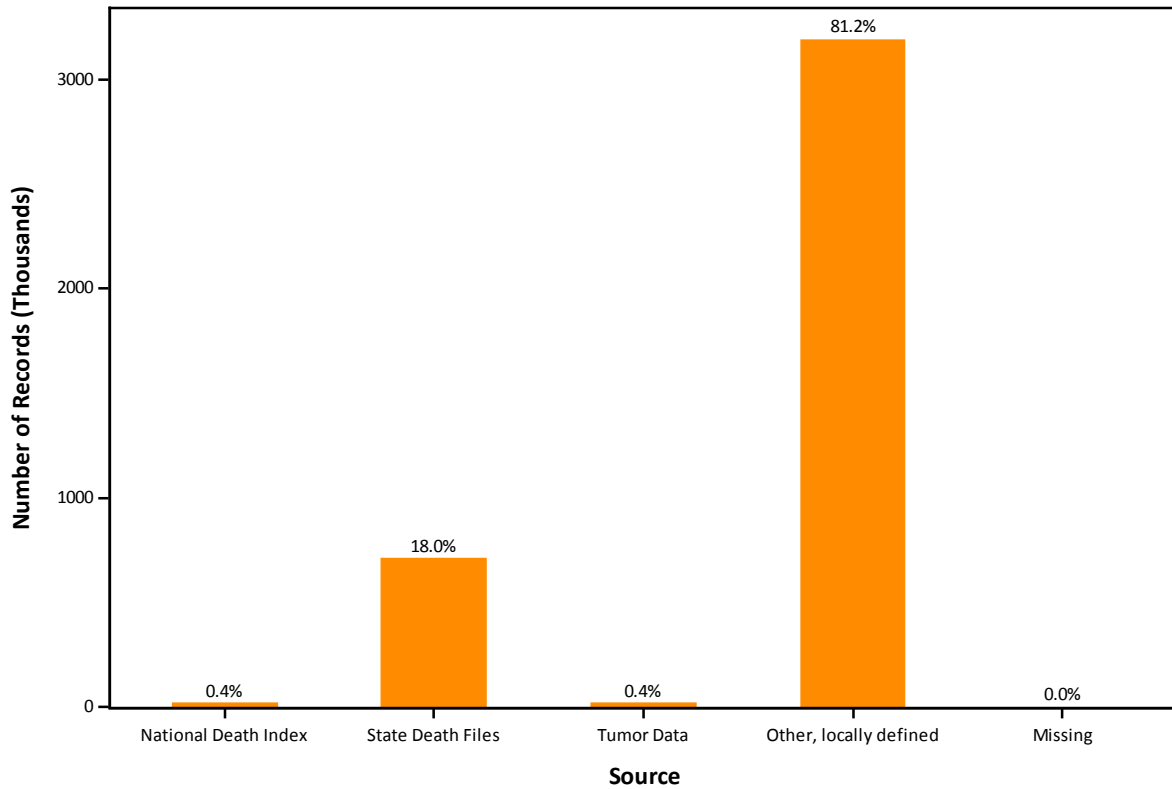
**Figure 9: Overall: Total Number of Encounters and Mean Number of Encounters per Member by Year-Month**



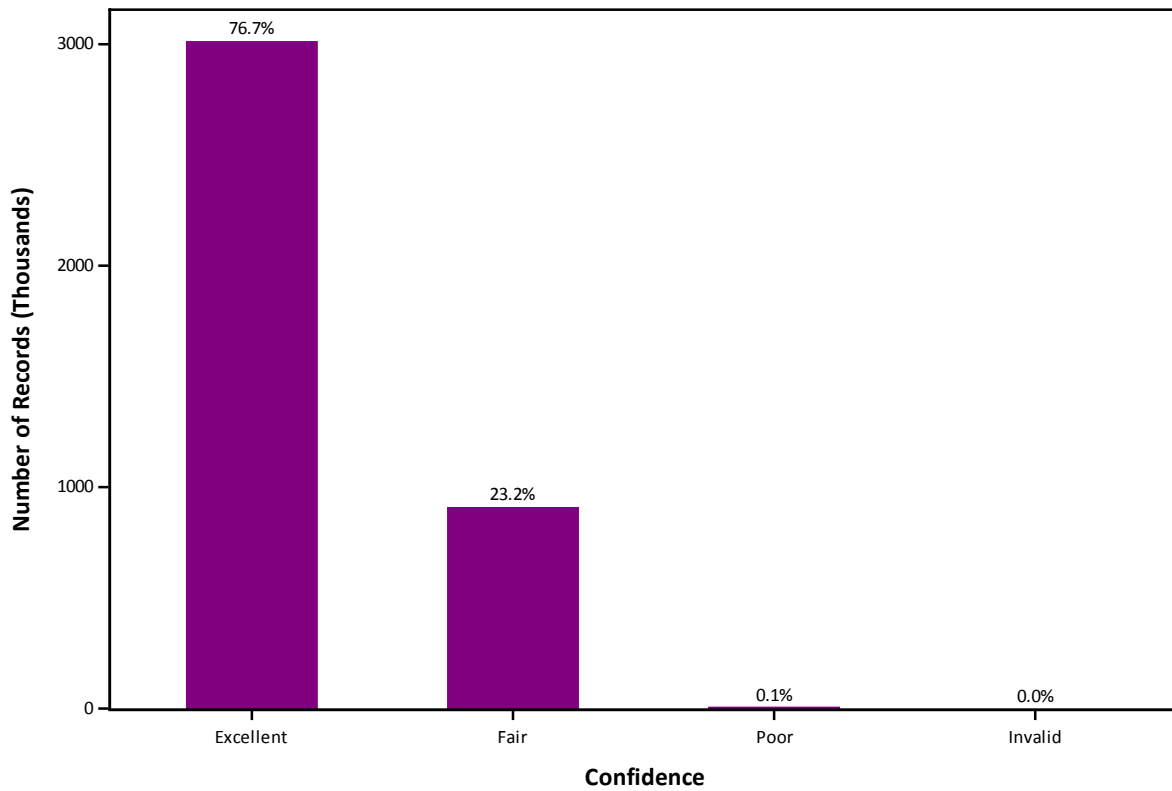
**Table 5: Snapshot of the Mini-Sentinel Distributed Database Death Table**

	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
% Unique Members with Cause of Death Available	--	75.3	86.4	72.4	83.1	--	--	36.2	87.5	89.7	--	100	--	58.2	--	86.7	--	92.9	88.7
Difference between death date and last known enrollment date (months)																			
Statistics:																			
Min	--	-1	-169	-4	-154	-148	-76	-106	-170	-170	--	-154	-143	-168	-68	-125	--	-147	-170
P1	--	0	-7	0	-5	-71	0	-56	-29	-2	--	-36	-30	-83	-48	-9	--	-20	-28
P5	--	0	0	0	0	-15	0	-11	-4	0	--	-2	-2	-5	-14	0	--	0	-2
P25	--	0	0	0	0	-3	0	0	0	0	--	0	0	0	0	0	--	0	0
Median	--	0	0	0	0	0	0	0	0	0	--	0	0	0	0	1	--	12	0
P75	--	0	8	2	9	0	0	0	6	0	--	0	7	33	10	1	--	50	0
P95	--	54	87	80	86	29	3	40	95	12	--	39	50	89	40	50	--	103	45
P99	--	102	118	114	120	57	6	64	133	52	--	85	73	114	55	82	--	119	89
Max	--	149	164	163	161	123	82	106	167	156	--	143	96	141	68	115	--	131	167
Source (%)																			
State Death Files	--	75.3	42.7	0.0	83.1	100	0.0	0.0	37.9	87.1	--	100	0.0	45.2	0.0	82.9	--	92.6	18.0
National Death Index	--	0.0	0.0	64.7	0.0	0.0	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	0.0	0.4
Tumor Data	--	0.0	15.3	7.8	0.0	0.0	0.0	0.0	0.0	4.6	--	0.0	0.0	1.0	0.0	5.1	--	0.6	0.4
Other, locally defined	--	24.7	42.0	27.5	16.9	0.0	100	100	62.1	8.3	--	0.0	100	53.8	100	12.0	--	6.8	81.2
Missing	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	0.0	0.0
Invalid	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	0.0	0.0
Confidence (%)																			
Excellent	--	100	91.4	100	83.1	100	100	98.1	98.4	100	--	100	8.6	61.7	100	97.5	--	89.0	76.7
Fair	--	0.0	7.7	0.0	16.9	0.0	0.0	0.3	1.5	0.0	--	0.0	91.4	31.1	0.0	1.6	--	11.0	23.2
Poor	--	0.0	0.9	0.0	0.0	0.0	0.0	1.6	0.1	0.0	--	0.0	0.0	7.3	0.0	0.9	--	0.0	0.1
Missing	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	0.0	0.0
Invalid	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	0.0	0.0

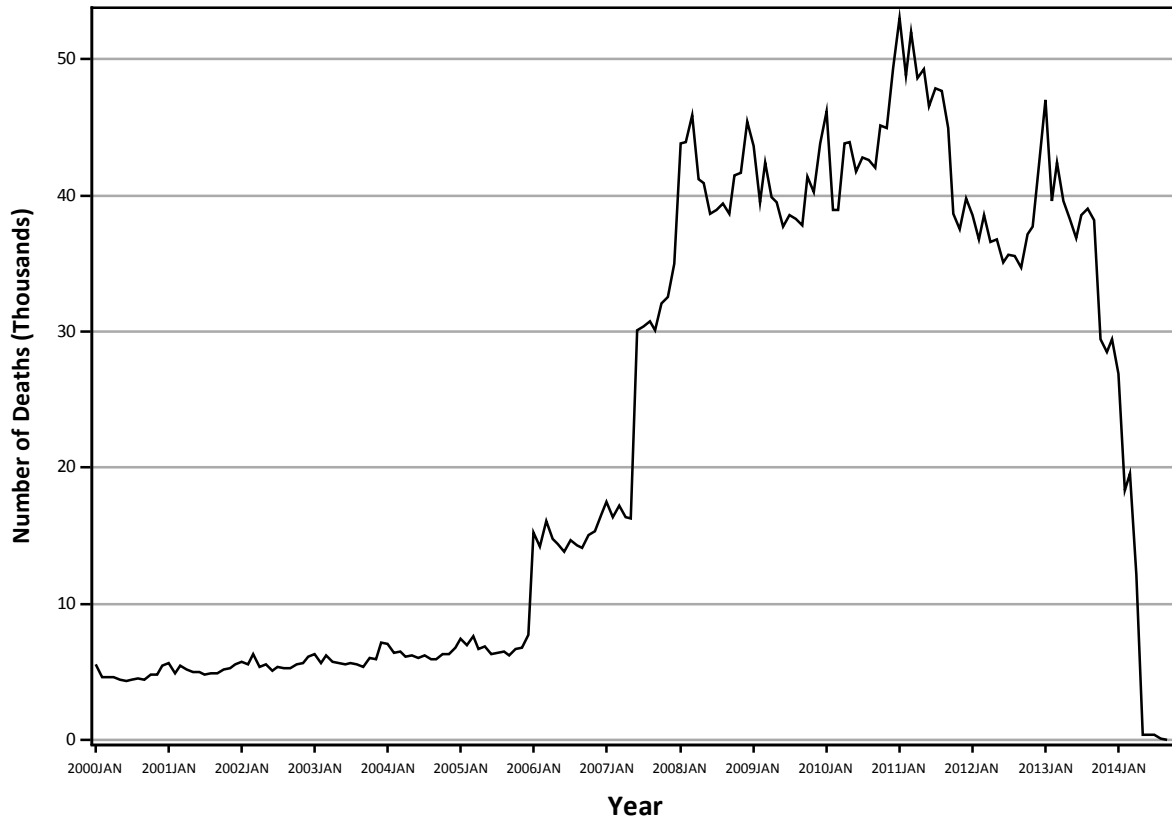
**Figure 10: Distribution of Records by Source in MSDD Death Table**



**Figure 11: Distribution of Records by Confidence in MSDD Death Table**



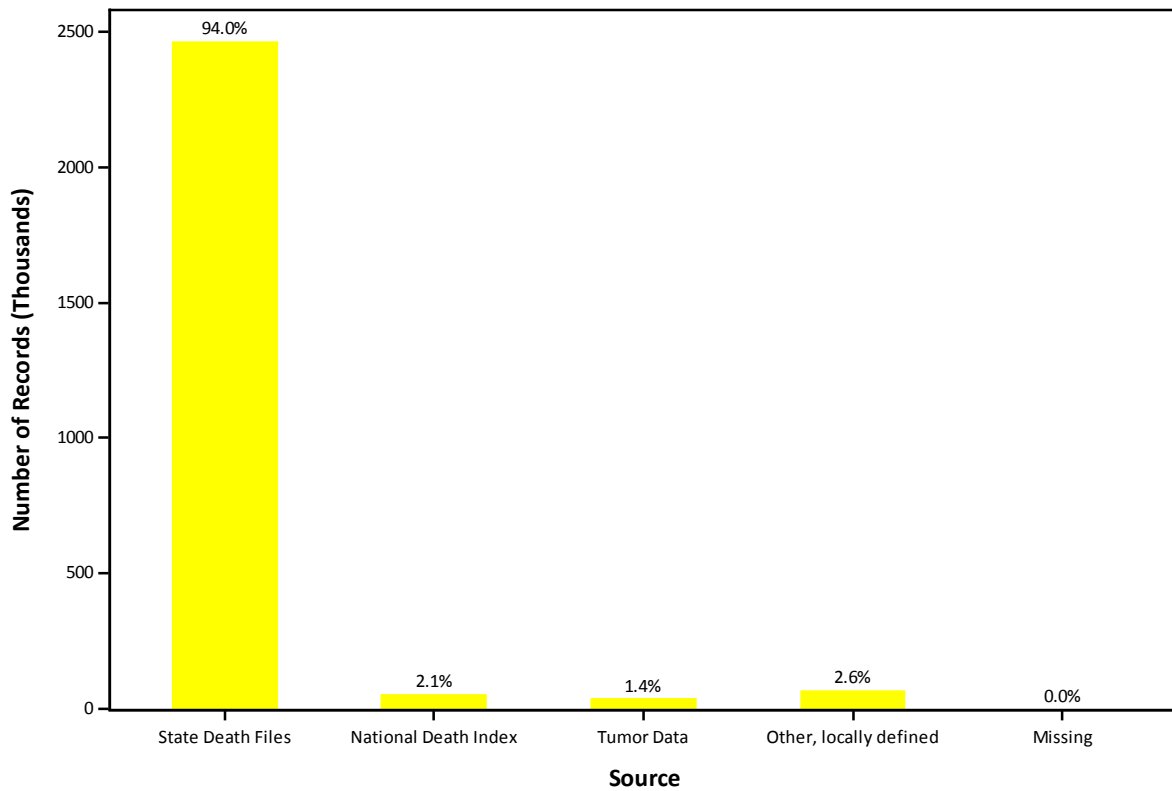
**Figure 12: Distribution of Records by Year in MSDD Death Table**



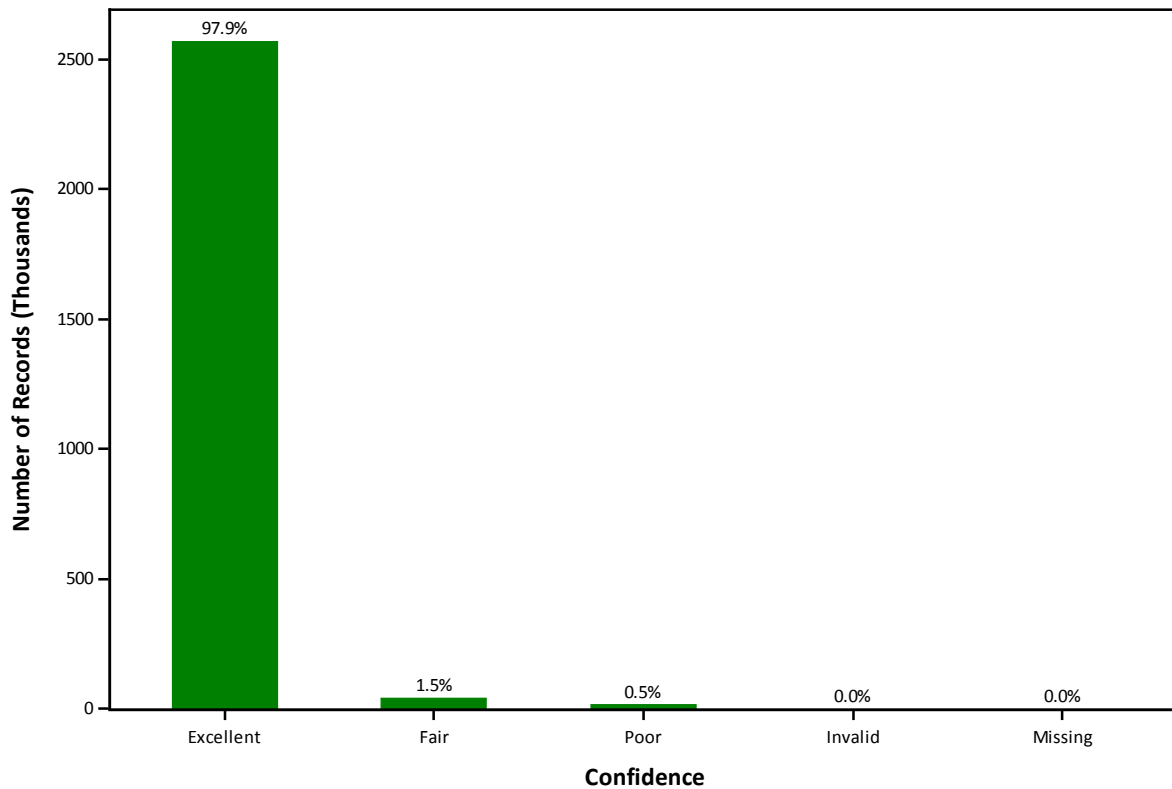
**Table 6: Snapshot of the Mini-Sentinel Distributed Database Cause of Death Table**

	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Source (%)																			
State Death Files	--	100	47.7	0.0	100	--	--	0.0	100	91.3	--	100	--	93.4	--	96.5	--	99.9	94.0
National Death Index	--	0.0	0.0	96.5	0.0	--	--	0.0	0.0	0.0	--	0.0	--	0.0	--	0.0	--	0.0	2.1
Tumor Data	--	0.0	12.9	3.5	0.0	--	--	0.4	0.0	8.7	--	0.0	--	6.6	--	3.5	--	0.1	1.4
Other, locally defined	--	0.0	39.4	0.0	0.0	--	--	99.6	0.0	0.0	--	0.0	--	0.0	--	0.0	--	0.0	2.6
Missing	--	0.0	0.0	0.0	0.0	--	--	0.0	0.0	0.0	--	0.0	--	0.0	--	0.0	--	0.0	0.0
Invalid	--	0.0	0.0	0.0	0.0	--	--	0.0	0.0	0.0	--	0.0	--	0.0	--	0.0	--	0.0	0.0
Confidence (%)																			
Excellent	--	100	92.3	100	100	--	--	45.5	99.1	100	--	100	--	79.2	--	86.9	--	95.6	97.9
Fair	--	0.0	6.7	0.0	0.0	--	--	0.5	0.9	0.0	--	0.0	--	11.3	--	9.8	--	4.4	1.5
Poor	--	0.0	1.0	0.0	0.0	--	--	54.0	0.0	0.0	--	0.0	--	9.5	--	3.3	--	0.0	0.5
Missing	--	0.0	0.0	0.0	0.0	--	--	0.0	0.0	0.0	--	0.0	--	0.0	--	0.0	--	0.0	0.0
Invalid	--	0.0	0.0	0.0	0.0	--	--	0.0	0.0	0.0	--	0.0	--	0.0	--	0.0	--	0.0	0.0
Cause Type (%)																			
Immediate/Primary	--	0.0	28.1	37.5	36.4	--	--	0.4	17.8	2.1	--	34.1	--	0.0	--	2.4	--	0.0	22.4
Underlying	--	28.4	33.7	33.1	0.0	--	--	0.0	36.5	30.2	--	65.9	--	52.8	--	33.2	--	39.0	44.2
Contributory	--	71.6	34.4	29.4	63.6	--	--	0.0	30.1	45.3	--	0.0	--	47.2	--	64.4	--	0.0	23.2
Other	--	0.0	3.7	0.0	0.0	--	--	0.0	15.6	22.4	--	0.0	--	0.0	--	0.0	--	61.0	9.8
Missing	--	0.0	0.0	0.0	0.0	--	--	99.6	0.0	0.0	--	0.0	--	0.0	--	0.0	--	0.0	0.4
Invalid	--	0.0	0.0	0.0	0.0	--	--	0.0	0.0	0.0	--	0.0	--	0.0	--	0.0	--	0.0	0.0

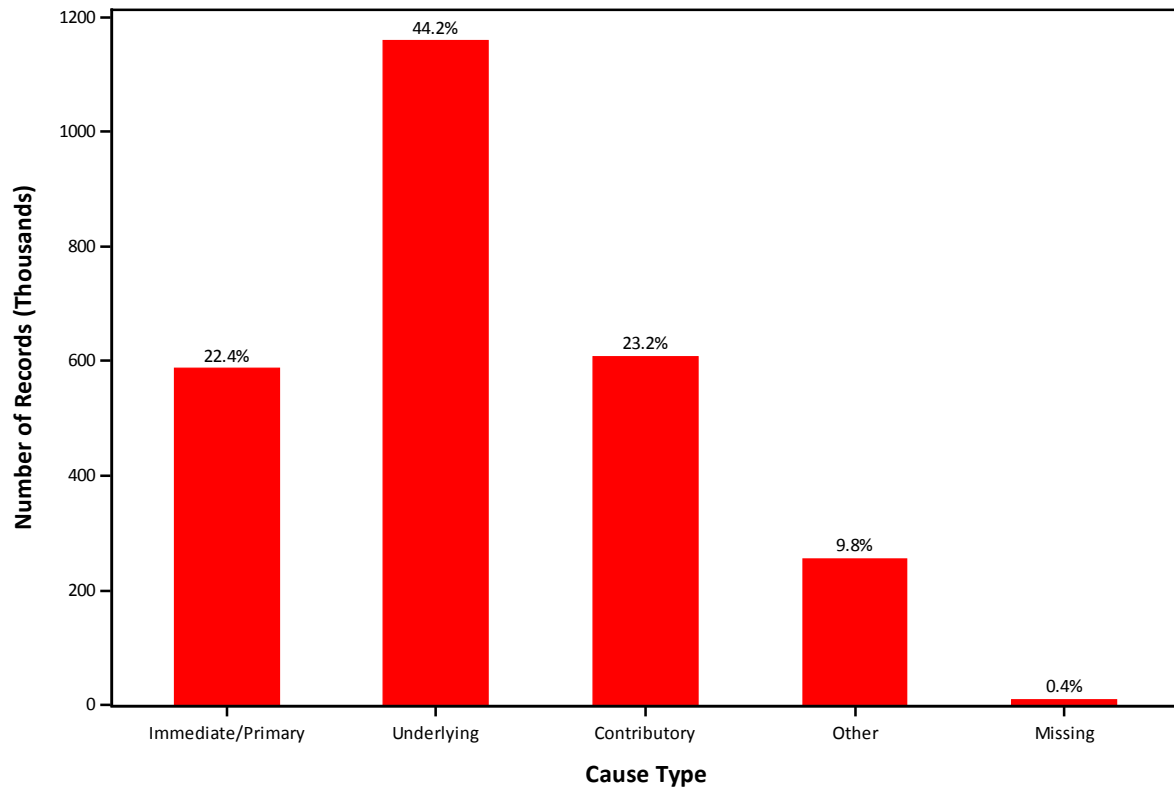
**Figure 13: Distribution of Records by Source in MSDD Cause of Death Table**



**Figure 14: Distribution of Records by Confidence in MSDD Cause of Death Table**



**Figure 15: Distribution of Records by Cause Type in MSDD Cause of Death Table**



**Table 7: Overview of Alkaline Phosphate (ALP) Laboratory Test Results**

	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Distribution of Specimen Source (%)																			
Blood	--	0.0	100	--	--	0.0	0.0	0.0	0.0	--	--	--	--	0.0	--	100	--	--	6.3
Plasma	--	0.0	0.0	--	--	0.0	0.0	0.0	0.0	--	--	--	--	99.9	--	0.0	--	--	2.5
Serum	--	0.0	0.0	--	--	0.0	100	100	100	--	--	--	--	0.1	--	0.0	--	--	86.7
Serum/Plasma	--	0.0	0.0	--	--	0.0	0.0	0.0	0.0	--	--	--	--	0.0	--	0.0	--	--	0.0
Other	--	0.0	0.0	--	--	0.0	0.0	0.0	0.0	--	--	--	--	0.0	--	0.0	--	--	0.0
Missing	--	100	0.0	--	--	100	0.0	0.0	0.0	--	--	--	--	0.0	--	0.0	--	--	4.4
Distribution of Patient Location (%)																			
Outpatient	99.2	0.0	87.7	71.3	--	81.8	0.0	99.6	63.2	86.5	--	--	100	0.0	--	87.2	--	--	78.8
Inpatient	0.0	0.0	12.3	28.7	--	0.0	1.0	0.4	35.2	13.5	--	--	0.0	0.0	--	12.8	--	--	3.2
Unknown	0.8	100	0.0	0.0	--	18.2	99.0	0.0	1.6	0.0	--	--	0.0	100	--	0.0	--	--	17.9
Other	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Distribution of result units (%)																			
U/L	84.9	0.0	98.5	100	--	98.5	69.4	100	100	100	--	--	100	100	--	100	--	--	88.7
Unknown	0.0	0.0	1.5	0.0	--	0.0	30.6	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	4.9
Other	12.6	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	4.6
Missing	2.4	100	0.0	0.0	--	1.5	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	1.8
Distribution of result values (U/L) (%)																			
< 25	0.2	--	0.1	0.2	--	0.1	0.1	0.1	0.1	0.1	--	--	0.1	0.2	--	0.1	--	--	0.1
25-75	64.7	--	38.0	55.7	--	47.2	56.6	45.1	42.5	36.7	--	--	61.0	66.6	--	44.6	--	--	59.0
76-150	31.6	--	51.4	34.0	--	43.7	40.3	46.7	44.6	52.0	--	--	35.2	28.4	--	47.3	--	--	36.2
151-350	3.2	--	8.9	8.1	--	7.3	2.7	6.9	10.2	9.3	--	--	3.3	4.1	--	6.7	--	--	4.0
> 350	0.3	--	1.7	2.0	--	1.7	0.3	1.2	2.7	2.0	--	--	0.3	0.7	--	1.3	--	--	0.6
Distribution of result values (Unknown) (%)																			
< 25	--	--	0.1	0.0	--	--	0.1	--	50.0	--	--	--	0.0	0.0	--	--	--	--	0.1
25-75	--	--	37.7	100	--	--	54.1	--	0.0	--	--	--	6.9	32.9	--	--	--	--	54.0
76-150	--	--	53.1	0.0	--	--	43.0	--	0.0	--	--	--	55.6	61.0	--	--	--	--	43.1
151-350	--	--	7.6	0.0	--	--	2.5	--	50.0	--	--	--	36.1	6.1	--	--	--	--	2.5
> 350	--	--	1.5	0.0	--	--	0.3	--	0.0	--	--	--	1.4	0.0	--	--	--	--	0.3



**Table 8: Overview of Alanine Aminotransferase (ALT) Laboratory Test Results**

	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Distribution of Specimen Source (%)																			
Plasma	--	0.0	--	--	--	0.0	0.0	0.0	0.0	--	--	--	--	100	--	--	--	--	3.4
Serum	--	0.0	--	--	--	0.0	100	100	100	--	--	--	--	0.0	--	--	--	--	92.6
Serum/Plasma	--	0.0	--	--	--	0.0	0.0	0.0	0.0	--	--	--	--	0.0	--	--	--	--	0.0
Other	--	0.0	--	--	--	0.0	0.0	0.0	0.0	--	--	--	--	0.0	--	--	--	--	0.0
Missing	--	100	--	--	--	100	0.0	0.0	0.0	--	--	--	--	0.0	--	--	--	--	4.1
Distribution of Patient Location (%)																			
Outpatient	98.1	0.0	93.2	91.3	--	84.1	0.0	99.8	88.2	93.0	--	--	100	0.0	--	89.4	--	--	81.6
Inpatient	0.0	0.0	6.8	8.7	--	0.0	1.0	0.2	11.1	7.0	--	--	0.0	0.0	--	10.6	--	--	2.7
Unknown	1.9	100	0.0	0.0	--	15.9	99.0	0.0	0.7	0.0	--	--	0.0	100	--	0.0	--	--	15.7
Other	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Distribution of result units (%)																			
U/L	97.5	0.0	100	100	--	99.3	69.7	100	100	100	--	--	100	100	--	100	--	--	94.4
Unknown	2.5	0.0	0.0	0.0	--	0.0	30.3	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	4.6
Other	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	100	0.0	0.0	--	0.7	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	1.0
Distribution of result values (U/L) (%)																			
< 20	49.2	--	25.6	32.2	--	52.8	56.7	38.9	44.5	33.5	--	--	46.0	40.3	--	37.1	--	--	46.4
20-<40	39.0	--	53.1	49.7	--	35.3	34.9	45.6	39.1	45.7	--	--	41.3	46.6	--	43.3	--	--	40.2
40-<80	9.7	--	16.3	13.7	--	8.9	6.9	12.2	11.9	15.2	--	--	10.5	10.7	--	14.1	--	--	10.5
80-<120	1.3	--	2.7	2.3	--	1.5	0.9	1.9	2.2	3.0	--	--	1.4	1.5	--	2.8	--	--	1.6
120-<240	0.6	--	1.6	1.4	--	1.0	0.5	1.1	1.5	1.8	--	--	0.7	0.7	--	1.8	--	--	0.9
240-<480	0.1	--	0.5	0.4	--	0.4	0.1	0.3	0.5	0.6	--	--	0.1	0.2	--	0.6	--	--	0.2
>= 480	0.0	--	0.2	0.3	--	0.2	0.0	0.1	0.3	0.3	--	--	0.1	0.1	--	0.2	--	--	0.1
Distribution of result values (Unknown) (%)																			
< 20	45.9	--	--	50.0	--	--	55.3	--	--	--	--	--	47.2	53.8	--	--	--	--	53.9
20-<40	41.2	--	--	50.0	--	--	36.6	--	--	--	--	--	44.4	31.9	--	--	--	--	37.3
40-<80	10.6	--	--	0.0	--	--	6.7	--	--	--	--	--	8.3	12.2	--	--	--	--	7.3
80-<120	1.5	--	--	0.0	--	--	0.9	--	--	--	--	--	0.0	1.4	--	--	--	--	1.0
120-<240	0.7	--	--	0.0	--	--	0.4	--	--	--	--	--	0.0	0.7	--	--	--	--	0.5
240-<480	0.1	--	--	0.0	--	--	0.1	--	--	--	--	--	0.0	0.0	--	--	--	--	0.1
>= 480	0.0	--	--	0.0	--	--	0.0	--	--	--	--	--	0.0	0.0	--	--	--	--	0.0

**Table 9: Overview of Absolute Neutrophil (ANC) Laboratory Test Results**

	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Distribution of Specimen Source (%)																			
Blood	--	0.0	100	100	--	0.0	100	100	100	100	--	--	100	100	--	100	--	--	97.0
Other	--	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	--	100	0.0	0.0	--	100	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	3.0
Distribution of Patient Location (%)																			
Outpatient	--	0.0	77.9	64.5	--	81.8	0.0	100	58.4	80.6	--	--	100	0.0	--	84.4	--	--	67.4
Inpatient	--	0.0	18.5	35.5	--	0.0	1.7	0.0	39.3	19.4	--	--	0.0	0.0	--	15.6	--	--	11.9
Unknown	--	100	3.5	0.0	--	18.2	98.3	0.0	2.3	0.0	--	--	0.0	100	--	0.0	--	--	20.7
Other	--	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	--	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Distribution of result units (%)																			
K/UL	--	0.0	100	100	--	35.8	66.6	0.0	100	100	--	--	100	0.0	--	99.7	--	--	91.3
Unknown	--	0.0	0.0	0.0	--	0.0	33.4	0.0	0.0	0.0	--	--	0.0	100	--	0.3	--	--	6.3
Other	--	0.0	0.0	0.0	--	60.2	0.0	100	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.9
Missing	--	100	0.0	0.0	--	4.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	1.4

**Table 10: Overview of Total Bilirubin Laboratory Test Results**

	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Distribution of Specimen Source (%)																			
Blood	--	0.0	100	--	--	0.0	0.0	0.0	0.0	--	--	--	--	0.0	--	100	--	--	9.1
Plasma	--	0.0	0.0	--	--	0.0	0.0	0.0	0.0	--	--	--	--	99.6	--	0.0	--	--	2.4
Serum	--	0.0	0.0	--	--	0.0	100	100	100	--	--	--	--	0.4	--	0.0	--	--	84.5
Serum/Plasma	--	0.0	0.0	--	--	0.0	0.0	0.0	0.0	--	--	--	--	0.0	--	0.0	--	--	0.0
Other	--	0.0	0.0	--	--	0.0	0.0	0.0	0.0	--	--	--	--	0.0	--	0.0	--	--	0.0
Missing	--	100	0.0	--	--	100	0.0	0.0	0.0	--	--	--	--	0.0	--	0.0	--	--	4.0
Distribution of Patient Location (%)																			
Outpatient	98.6	0.0	86.8	64.6	--	81.4	0.0	99.6	57.9	86.6	--	--	100	0.0	--	86.4	--	--	78.1
Inpatient	0.0	0.0	13.2	35.4	--	0.0	1.1	0.4	40.5	13.4	--	--	0.0	0.0	--	13.6	--	--	4.0
Unknown	1.4	100	0.0	0.0	--	18.6	98.9	0.0	1.6	0.0	--	--	0.0	100	--	0.0	--	--	17.9
Other	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Distribution of result units (%)																			
MG/DL	97.3	0.0	100	100	--	98.4	69.2	100	100	100	--	--	100	100	--	100	--	--	93.3
Unknown	0.0	0.0	0.0	0.0	--	0.0	30.8	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	4.9
Other	2.4	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.9
Missing	0.3	100	0.0	0.0	--	1.6	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	1.0
Distribution of result values (MG/DL) (%)																			
< 0.3	15.9	--	6.3	1.8	--	4.4	6.2	13.5	7.6	8.0	--	--	6.5	2.2	--	14.9	--	--	10.2
0.3-1.0	77.2	--	80.9	66.0	--	82.8	88.2	77.0	65.5	81.9	--	--	87.0	83.8	--	76.2	--	--	81.1
>1.0-1.5	5.0	--	6.4	12.1	--	6.8	4.1	4.2	6.6	5.4	--	--	4.6	9.7	--	3.7	--	--	5.0
>1.5-3.0	1.6	--	3.2	7.6	--	3.9	1.3	2.2	4.7	3.0	--	--	1.5	3.0	--	2.0	--	--	1.9
>3.0	0.4	--	3.1	12.5	--	2.1	0.4	3.1	15.6	1.8	--	--	0.3	1.3	--	3.1	--	--	1.8
Distribution of result values (Unknown) (%)																			
< 0.3	--	--	13.0	2.9	--	--	10.3	--	0.0	--	--	--	0.0	--	--	--	--	--	10.3
0.3-1.0	--	--	56.5	85.3	--	--	85.9	--	100	--	--	--	63.6	--	--	--	--	--	85.9
>1.0-1.5	--	--	4.3	11.8	--	--	2.8	--	0.0	--	--	--	9.1	--	--	--	--	--	2.8
>1.5-3.0	--	--	0.0	0.0	--	--	0.8	--	0.0	--	--	--	0.0	--	--	--	--	--	0.8
>3.0	--	--	26.1	0.0	--	--	0.2	--	0.0	--	--	--	27.3	--	--	--	--	--	0.2

**Table 11: Overview of Total Creatine Kinase (CK) Laboratory Test Results**

	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Distribution of Specimen Source (%)																			
Blood	--	0.0	100	0.0	--	0.0	0.0	0.0	0.0	--	--	--	0.0	0.0	--	100	--	--	1.9
Plasma	--	0.0	0.0	100	--	0.0	0.0	0.0	0.0	--	--	--	0.0	98.5	--	0.0	--	--	5.5
Serum	--	0.0	0.0	0.0	--	0.0	100	100	100	--	--	--	100	1.5	--	0.0	--	--	86.4
Serum/Plasma	--	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	--	--	--	0.0	0.0	--	0.0	--	--	0.0
Other	--	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	--	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	--	100	0.0	0.0	--	100	0.0	0.0	0.0	--	--	--	0.0	0.0	--	0.0	--	--	6.2
Distribution of Patient Location (%)																			
Outpatient	99.6	0.0	89.3	57.0	--	82.8	0.0	99.9	58.3	59.3	--	--	100	0.0	--	92.0	--	--	69.4
Inpatient	0.0	0.0	10.7	43.0	--	0.0	2.7	0.1	38.4	40.7	--	--	0.0	0.0	--	8.0	--	--	17.8
Unknown	0.4	100	0.0	0.0	--	17.2	97.3	0.0	3.4	0.0	--	--	0.0	100	--	0.0	--	--	12.8
Other	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Distribution of result units (%)																			
U/L	97.6	0.0	100	100	--	79.0	70.4	100	100	100	--	--	100	96.8	--	100	--	--	94.9
Unknown	2.4	0.0	0.0	0.0	--	0.0	29.6	0.0	0.0	0.0	--	--	0.0	3.2	--	0.0	--	--	3.2
Other	0.0	0.0	0.0	0.0	--	19.3	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.5
Missing	0.0	100	0.0	0.0	--	1.7	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	1.4
Distribution of result values (U/L) (%)																			
< 120	61.2	--	56.6	48.7	--	69.1	68.4	47.4	63.8	67.5	--	--	60.6	50.2	--	55.7	--	--	62.2
120-<250	27.5	--	26.0	30.5	--	19.0	22.3	32.1	22.1	19.4	--	--	28.0	29.0	--	26.7	--	--	24.8
250-<500	8.2	--	10.5	12.1	--	6.6	6.4	13.6	7.7	7.1	--	--	8.3	13.0	--	11.0	--	--	8.2
500-<1000	2.1	--	3.8	4.7	--	2.8	1.8	4.6	3.3	3.1	--	--	2.1	4.8	--	3.6	--	--	2.8
1000-<1500	0.4	--	1.0	1.2	--	0.9	0.4	1.0	1.0	1.0	--	--	0.4	0.9	--	1.0	--	--	0.8
>= 1500	0.6	--	2.2	2.9	--	1.6	0.6	1.3	2.1	1.9	--	--	0.5	2.0	--	2.0	--	--	1.4
Distribution of result values (Unknown) (%)																			
< 120	61.3	--	55.6	--	--	--	68.8	--	0.0	--	--	--	69.2	60.8	--	--	--	--	67.7
120-<250	27.7	--	11.1	--	--	--	22.8	--	0.0	--	--	--	28.2	26.5	--	--	--	--	23.5
250-<500	8.2	--	27.8	--	--	--	6.4	--	0.0	--	--	--	2.6	8.2	--	--	--	--	6.6
500-<1000	2.0	--	5.6	--	--	--	1.5	--	0.0	--	--	--	0.0	2.7	--	--	--	--	1.6
1000-<1500	0.4	--	0.0	--	--	--	0.2	--	0.0	--	--	--	0.0	0.4	--	--	--	--	0.3
>= 1500	0.5	--	0.0	--	--	--	0.3	--	100	--	--	--	0.0	1.3	--	--	--	--	0.4

**Table 12: Overview of Creatinine Laboratory Test Results**

	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Distribution of Specimen Source (%)																			
Blood	100	0.0	100	--	--	0.0	1.1	0.0	0.2	--	--	--	--	2.2	--	100	--	--	7.5
Plasma	0.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0	--	--	--	--	97.8	--	0.0	--	--	2.7
Serum	0.0	0.0	0.0	--	--	0.0	98.9	100	99.8	--	--	--	--	0.0	--	0.0	--	--	85.1
Serum/Plasma	0.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0	--	--	--	--	0.0	--	0.0	--	--	0.0
Other	0.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0	--	--	--	--	0.0	--	0.0	--	--	0.0
Missing	0.0	100	0.0	--	--	100	0.0	0.0	0.0	--	--	--	--	0.0	--	0.0	--	--	4.6
Distribution of Patient Location (%)																			
Outpatient	98.2	0.0	80.9	72.5	--	80.3	0.0	98.7	66.2	83.5	--	--	100	0.0	--	90.2	--	--	74.4
Inpatient	0.0	0.0	19.1	27.5	--	0.0	2.1	0.3	32.0	16.5	--	--	0.0	0.0	--	9.8	--	--	9.6
Unknown	1.8	100	0.0	0.0	--	19.7	97.9	1.0	1.8	0.0	--	--	0.0	100	--	0.0	--	--	15.9
Other	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Distribution of result units (%)																			
MG/DL	98.4	0.0	100	100	--	98.6	71.5	100	100	100	--	--	100	100	--	100	--	--	94.7
Unknown	1.6	0.0	0.0	0.0	--	0.0	28.5	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	4.0
Other	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	100	0.0	0.0	--	1.4	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	1.4
Distribution of result values (MG/DL) (%)																			
< 0.8	39.3	--	14.9	22.1	--	21.0	26.0	28.7	34.7	31.6	--	--	32.9	18.9	--	30.8	--	--	33.1
0.8-<1.4	56.4	--	68.1	58.1	--	62.3	60.7	57.5	52.4	55.4	--	--	62.4	68.9	--	57.4	--	--	57.8
1.4-<2.0	3.0	--	11.3	9.8	--	10.9	9.2	8.4	7.2	8.1	--	--	3.4	9.1	--	7.9	--	--	5.7
2.0-<4.0	1.0	--	4.5	5.0	--	4.4	3.3	3.9	3.9	3.8	--	--	1.1	2.5	--	3.1	--	--	2.4
>= 4.0	0.2	--	1.1	5.0	--	1.4	0.7	1.5	1.8	1.1	--	--	0.2	0.7	--	0.8	--	--	0.9
Distribution of result values (Unknown) (%)																			
< 0.8	43.4	--	100	40.0	--	--	21.8	1.6	0.0	--	--	--	33.3	--	--	--	--	--	24.0
0.8-<1.4	52.3	--	0.0	60.0	--	--	65.1	2.3	0.0	--	--	--	66.7	--	--	--	--	--	63.8
1.4-<2.0	3.0	--	0.0	0.0	--	--	9.6	1.7	0.0	--	--	--	0.0	--	--	--	--	--	8.9
2.0-<4.0	1.1	--	0.0	0.0	--	--	3.1	0.7	0.0	--	--	--	0.0	--	--	--	--	--	2.9
>= 4.0	0.3	--	0.0	0.0	--	--	0.4	93.7	100	--	--	--	0.0	--	--	--	--	--	0.4

**Table 13: Overview of Glucose Laboratory Test Results**

	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Distribution of Specimen Source (%)																			
Fasting																			
Blood	100	0.0	100	--	--	0.0	4.0	0.0	0.0	--	--	--	100	0.0	--	100	--	--	6.0
Plasma	0.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0	--	--	--	0.0	100	--	0.0	--	--	1.0
Serum	0.0	0.0	0.0	--	--	0.0	96.0	100	100	--	--	--	0.0	0.0	--	0.0	--	--	92.0
Serum/Plasma	0.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0	--	--	--	0.0	0.0	--	0.0	--	--	0.0
Other	0.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0	--	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	100	0.0	--	--	100	0.0	0.0	0.0	--	--	--	0.0	0.0	--	0.0	--	--	1.0
Random (non-fasting)																			
Blood	100	0.0	100	100	--	0.0	1.8	0.1	0.0	--	--	--	100	19.7	--	100	--	--	10.2
Plasma	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	--	--	--	0.0	80.3	--	0.0	--	--	3.6
Serum	0.0	0.0	0.0	0.0	--	0.0	98.2	99.9	100	--	--	--	0.0	0.0	--	0.0	--	--	79.1
Serum/Plasma	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	--	--	--	0.0	0.0	--	0.0	--	--	0.0
Other	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	--	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	100	0.0	0.0	--	100	0.0	0.0	0.0	--	--	--	0.0	0.0	--	0.0	--	--	7.1
Distribution of Patient Location (%)																			
Fasting																			
Outpatient	99.9	0.0	100	96.1	--	85.5	0.0	99.3	98.0	93.6	--	--	100	0.0	--	99.9	--	--	96.1
Inpatient	0.0	0.0	0.0	3.9	--	0.0	0.0	0.0	1.8	6.4	--	--	0.0	0.0	--	0.1	--	--	1.2
Unknown	0.1	100	0.0	0.0	--	14.5	100	0.7	0.2	0.0	--	--	0.0	100	--	0.0	--	--	2.7
Other	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Random (non-fasting)																			
Outpatient	97.3	0.0	63.5	49.8	--	77.3	0.0	97.6	29.5	74.3	--	--	100	0.0	--	84.8	--	--	67.2
Inpatient	0.0	0.0	36.5	50.2	--	0.0	2.9	0.7	67.1	25.7	--	--	0.0	0.0	--	15.2	--	--	12.6
Unknown	2.7	100	0.0	0.0	--	22.7	97.1	1.7	3.4	0.0	--	--	0.0	100	--	0.0	--	--	20.2
Other	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Distribution of result units (%)																			
Fasting																			
MG/DL	99.9	0.0	100	100	--	98.6	90.0	100	100	100	--	--	100	99.9	--	100	--	--	99.2
Unknown	0.1	0.0	0.0	0.0	--	0.0	10.0	0.0	0.0	0.0	--	--	0.0	0.1	--	0.0	--	--	0.1
Other	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	100	0.0	0.0	--	1.4	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.6
Random (non-fasting)																			
MG/DL	98.3	0.0	100	100	--	97.8	70.4	99.9	100	100	--	--	100	100	--	100	--	--	93.2
Unknown	1.7	0.0	0.0	0.0	--	0.0	29.6	0.1	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	5.1
Other	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	100	0.0	0.0	--	2.2	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	1.7
Distribution of result values (MG/DL) (%)																			
Fasting																			
< 75	4.8	--	2.0	1.0	--	17.8	4.5	2.4	1.2	1.6	--	--	5.5	4.1	--	0.7	--	--	2.5
75-<100	63.6	--	64.7	42.0	--	52.4	46.9	50.8	52.2	56.1	--	--	61.0	59.4	--	49.0	--	--	55.2
100-<126	21.3	--	24.6	36.4	--	15.6	27.9	28.9	31.0	31.0	--	--	22.6	24.8	--	36.2	--	--	28.1
126-<150	4.8	--	4.0	9.1	--	6.5	9.0	7.6	7.0	5.5	--	--	5.3	5.5	--	7.0	--	--	6.4
150-<250	4.6	--	3.8	9.6	--	7.2	9.6	8.3	7.2	4.8	--	--	4.7	5.0	--	5.7	--	--	6.4
>= 250	1.0	--	1.0	2.0	--	0.6	2.2	2.0	1.4	1.0	--	--	0.9	1.3	--	1.4	--	--	1.3
Random (non-fasting)																			
< 75	5.0	--	4.7	2.9	--	2.9	3.8	4.8	5.1	4.6	--	--	4.9	4.3	--	3.0	--	--	4.7
75-<100	60.6	--	41.5	29.5	--	37.4	47.1	48.5	39.7	44.1	--	--	60.4	46.4	--	43.5	--	--	53.3
100-<126	22.4	--	27.4	32.2	--	30.4	27.8	26.5	28.4	27.8	--	--	22.7	23.7	--	30.5	--	--	24.8

**Table 13: Overview of Glucose Laboratory Test Results**

	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
126-<150	5.3	--	10.4	13.2	--	11.6	8.8	7.5	11.0	9.8	--	--	5.3	8.1	--	9.5	--	--	7.2
150-<250	5.4	--	12.6	16.3	--	14.3	10.1	8.8	12.4	10.8	--	--	5.3	12.5	--	10.3	--	--	7.9
250-<350	1.1	--	2.5	3.8	--	2.6	1.9	2.3	2.4	2.1	--	--	1.1	3.4	--	2.2	--	--	1.6
350-<500	0.3	--	0.7	1.5	--	0.7	0.5	1.1	0.8	0.7	--	--	0.3	1.3	--	0.8	--	--	0.5
>= 500	0.0	--	0.1	0.5	--	0.1	0.1	0.4	0.3	0.2	--	--	0.0	0.1	--	0.2	--	--	0.1
Distribution of result values (Unknown) (%)																			
Fasting																			
< 75	8.6	--	1.2	0.0	--	--	6.3	0.0	--	--	--	--	11.3	5.7	--	--	--	--	6.6
75-<100	61.9	--	81.7	0.0	--	--	44.9	85.7	--	--	--	--	69.6	75.5	--	--	--	--	47.7
100-<126	19.4	--	17.1	100	--	--	31.0	0.0	--	--	--	--	10.8	16.0	--	--	--	--	29.1
126-<150	5.1	--	0.0	0.0	--	--	9.2	0.0	--	--	--	--	3.3	1.9	--	--	--	--	8.5
150-<250	4.3	--	0.0	0.0	--	--	7.6	14.3	--	--	--	--	5.0	0.0	--	--	--	--	7.1
>= 250	0.7	--	0.0	0.0	--	--	1.0	0.0	--	--	--	--	0.0	0.9	--	--	--	--	1.0
Random (non-fasting)																			
< 75	6.3	--	5.0	0.0	--	--	4.4	7.4	0.0	--	--	--	37.5	5.3	--	--	--	--	4.6
75-<100	58.6	--	20.0	0.0	--	--	50.1	12.4	0.0	--	--	--	25.0	26.3	--	--	--	--	50.9
100-<126	22.5	--	35.0	100	--	--	27.7	17.9	0.0	--	--	--	0.0	21.1	--	--	--	--	27.2
126-<150	5.4	--	5.0	0.0	--	--	8.2	11.2	0.0	--	--	--	12.5	11.7	--	--	--	--	7.9
150-<250	5.6	--	15.0	0.0	--	--	8.0	28.1	0.0	--	--	--	12.5	16.4	--	--	--	--	7.8
250-<350	1.2	--	20.0	0.0	--	--	1.2	16.6	0.0	--	--	--	12.5	7.6	--	--	--	--	1.2
350-<500	0.3	--	0.0	0.0	--	--	0.3	5.7	0.0	--	--	--	0.0	11.7	--	--	--	--	0.3
>= 500	0.0	--	0.0	0.0	--	--	0.0	0.6	100	--	--	--	0.0	0.0	--	--	--	--	0.0

**Table 14: Overview of Glycosylated Hemoglobin (HgbA1c) Laboratory Test Results**

	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Distribution of Specimen Source (%)																			
Blood	100	0.0	100	100	--	0.0	100	100	100	100	--	--	100	100	--	100	--	--	98.4
Other	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	100	0.0	0.0	--	100	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	1.6
Distribution of Patient Location (%)																			
Outpatient	98.1	0.0	99.0	98.6	--	79.6	0.0	100	98.1	97.2	--	--	100	0.0	--	99.6	--	--	81.4
Inpatient	0.0	0.0	1.0	1.4	--	0.0	0.6	0.0	1.6	2.8	--	--	0.0	0.0	--	0.4	--	--	0.6
Unknown	1.9	100	0.0	0.0	--	20.4	99.4	0.0	0.3	0.0	--	--	0.0	100	--	0.0	--	--	18.1
Other	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Distribution of result units (%)																			
Percent	39.7	0.0	100	100	--	87.5	71.8	100	100	100	--	--	100	100	--	100	--	--	79.0
Unknown	1.6	0.0	0.0	0.0	--	0.0	28.2	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	4.7
Other	0.0	0.0	0.0	0.0	--	12.3	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.1
Missing	58.7	100	0.0	0.0	--	0.2	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	16.1
Distribution of result values (PERCENT) (%)																			
< 6.00	42.6	--	18.4	41.8	--	26.5	28.6	22.2	33.0	34.4	--	--	40.4	26.8	--	29.7	--	--	35.0
6.00-6.50	22.8	--	19.1	18.7	--	26.4	28.4	22.7	20.9	21.1	--	--	23.0	17.7	--	19.2	--	--	22.7
6.51-6.99	8.8	--	11.7	7.8	--	12.9	12.0	11.9	10.4	9.7	--	--	9.3	10.5	--	11.3	--	--	10.1
7.00-7.50	8.6	--	15.1	9.0	--	14.2	11.5	13.3	11.9	11.5	--	--	9.2	13.1	--	13.5	--	--	10.8
7.51-7.99	3.8	--	7.9	4.5	--	6.1	4.9	6.4	5.7	5.6	--	--	4.1	6.7	--	6.5	--	--	5.0
8.00-8.50	3.9	--	8.8	5.0	--	5.5	5.0	6.8	5.9	5.9	--	--	4.2	7.4	--	6.7	--	--	5.2
8.51-8.99	1.9	--	4.2	2.6	--	2.3	2.3	3.3	2.7	2.7	--	--	2.0	3.6	--	3.1	--	--	2.4
9.00-9.99	3.2	--	6.6	4.4	--	3.3	3.5	5.6	4.3	4.2	--	--	3.4	6.0	--	4.8	--	--	3.9
10.00-10.99	1.9	--	3.7	2.6	--	1.5	1.9	3.4	2.4	2.3	--	--	2.0	3.6	--	2.6	--	--	2.2
11.00-14.99	2.3	--	4.3	3.5	--	1.2	1.9	4.2	2.8	2.4	--	--	2.3	4.4	--	2.6	--	--	2.6
15.00-19.99	0.1	--	0.2	0.2	--	0.0	0.1	0.2	0.1	0.1	--	--	0.1	0.3	--	0.1	--	--	0.1
>= 20.00	0.0	--	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Distribution of result values (Unknown) (%)																			
< 6.00	43.4	--	--	--	--	--	25.7	28.1	--	--	--	--	--	--	--	--	--	--	27.2
6.00-6.50	23.6	--	--	--	--	--	29.8	24.6	--	--	--	--	--	--	--	--	--	--	29.3
6.51-6.99	8.5	--	--	--	--	--	13.1	8.8	--	--	--	--	--	--	--	--	--	--	12.7
7.00-7.50	8.1	--	--	--	--	--	12.4	8.8	--	--	--	--	--	--	--	--	--	--	12.0
7.51-7.99	3.5	--	--	--	--	--	5.1	3.5	--	--	--	--	--	--	--	--	--	--	5.0
8.00-8.50	3.7	--	--	--	--	--	4.9	3.5	--	--	--	--	--	--	--	--	--	--	4.8
8.51-8.99	1.8	--	--	--	--	--	2.2	5.3	--	--	--	--	--	--	--	--	--	--	2.1
9.00-9.99	3.0	--	--	--	--	--	3.3	5.3	--	--	--	--	--	--	--	--	--	--	3.3
10.00-10.99	1.9	--	--	--	--	--	1.7	7.0	--	--	--	--	--	--	--	--	--	--	1.7
11.00-14.99	2.4	--	--	--	--	--	1.7	5.3	--	--	--	--	--	--	--	--	--	--	1.7
15.00-19.99	0.1	--	--	--	--	--	0.1	0.0	--	--	--	--	--	--	--	--	--	--	0.1
>= 20.00	0.0	--	--	--	--	--	0.0	0.0	--	--	--	--	--	--	--	--	--	--	0.0



**Table 15: Overview of Hemoglobin Laboratory Test Results**

	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Distribution of Specimen Source (%)																			
Blood	100	0.0	100	100	--	0.0	100	100	100	100	--	--	100	100	--	100	--	--	97.7
Other	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	100	0.0	0.0	--	100	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	2.3
Distribution of Patient Location (%)																			
Outpatient	98.9	0.0	78.2	67.0	--	81.5	0.0	99.7	62.0	81.8	--	--	100	0.0	--	86.7	--	--	74.2
Inpatient	0.0	0.0	21.8	33.0	--	0.0	2.9	0.3	35.8	18.2	--	--	0.0	0.0	--	13.3	--	--	12.4
Unknown	1.1	100	0.0	0.0	--	18.5	97.1	0.0	2.3	0.0	--	--	0.0	100	--	0.0	--	--	13.4
Other	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Distribution of result units (%)																			
G/DL	94.5	0.0	100	100	--	98.5	70.6	100	100	100	--	--	100	100	--	100	--	--	94.3
Unknown	0.0	0.0	0.0	0.0	--	0.0	29.4	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	2.9
Other	1.4	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.3
Missing	4.0	100	0.0	0.0	--	1.5	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	2.4
Distribution of result values (G/DL) (%)																			
< 10	2.2	--	6.8	12.2	--	9.6	6.2	4.8	12.3	9.6	--	--	1.9	4.4	--	5.3	--	--	6.2
10-<12	12.3	--	15.0	26.0	--	25.3	18.4	18.4	22.9	20.3	--	--	11.2	18.0	--	19.2	--	--	16.8
12-<14	45.2	--	30.7	36.4	--	38.1	42.7	44.5	37.5	39.9	--	--	43.9	44.7	--	43.7	--	--	41.5
14-<16	34.5	--	34.8	21.6	--	23.6	28.1	27.8	23.0	25.8	--	--	36.2	28.3	--	27.4	--	--	29.9
>= 16	5.8	--	12.7	3.9	--	3.4	4.6	4.6	4.3	4.4	--	--	6.9	4.6	--	4.4	--	--	5.5
Distribution of result values (Unknown) (%)																			
< 10	--	--	36.1	--	--	--	3.8	--	--	--	--	--	--	3.0	--	--	--	--	3.8
10-<12	--	--	35.3	--	--	--	18.2	--	--	--	--	--	--	18.8	--	--	--	--	18.2
12-<14	--	--	19.9	--	--	--	45.6	--	--	--	--	--	--	40.7	--	--	--	--	45.6
14-<16	--	--	6.6	--	--	--	28.4	--	--	--	--	--	--	31.7	--	--	--	--	28.4
>= 16	--	--	2.1	--	--	--	4.0	--	--	--	--	--	--	5.8	--	--	--	--	4.0

**Table 16: Overview of International Normalized Ratio (INR) Laboratory Test Results**

	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Distribution of Specimen Source (%)																			
Blood	0.5	0.0	42.6	0.0	--	0.0	1.0	100	--	0.0	--	--	0.0	100	--	100	--	--	21.7
Platelet Poor Plasma	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	--	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Other	99.5	0.0	57.4	100	--	0.0	99.0	0.0	--	100	--	--	100	0.0	--	0.0	--	--	67.9
Missing	0.0	100	0.0	0.0	--	100	0.0	0.0	--	0.0	--	--	0.0	0.0	--	0.0	--	--	10.4
Distribution of Patient Location (%)																			
Outpatient	98.5	0.0	85.6	73.1	--	77.9	0.0	99.9	71.2	89.1	--	--	100	0.0	--	95.9	--	--	69.5
Inpatient	0.0	0.0	11.7	26.9	--	0.0	4.0	0.1	27.4	10.9	--	--	0.0	0.0	--	4.1	--	--	13.6
Unknown	1.5	100	2.7	0.0	--	22.1	96.0	0.0	1.5	0.0	--	--	0.0	100	--	0.0	--	--	16.8
Other	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Distribution of result units (%)																			
(blank)	17.2	100	100	100	--	99.4	99.8	100	100	100	--	--	100	0.0	--	100	--	--	88.1
Unknown	82.8	0.0	0.0	0.0	--	0.0	0.2	0.0	0.0	0.0	--	--	0.0	100	--	0.0	--	--	11.9
Other	0.0	0.0	0.0	0.0	--	0.6	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Distribution of result values (%)																			
< 1.0	3.8	0.8	1.9	5.2	--	0.8	2.5	3.1	2.4	1.6	--	--	4.1	--	--	2.5	--	--	2.4
1.0-1.4	35.0	18.4	17.1	28.7	--	19.9	26.9	20.8	30.4	19.4	--	--	34.3	--	--	12.0	--	--	26.0
1.5-1.9	15.3	17.3	17.6	14.9	--	18.5	18.7	16.9	15.6	14.6	--	--	15.9	--	--	14.1	--	--	16.1
2.0-2.4	18.7	24.6	25.6	20.9	--	26.0	21.0	25.5	21.6	26.4	--	--	18.9	--	--	29.0	--	--	22.9
2.5-2.9	13.3	19.0	19.3	15.8	--	18.4	14.3	18.5	15.7	21.1	--	--	13.1	--	--	24.0	--	--	16.9
3.0-3.4	6.9	10.0	10.0	7.8	--	8.8	7.6	8.6	7.6	9.9	--	--	6.8	--	--	10.8	--	--	8.3
3.5-3.9	3.2	4.7	4.3	3.3	--	3.8	3.8	3.5	3.3	3.8	--	--	3.2	--	--	4.2	--	--	3.6
4.0-4.4	1.6	2.2	2.0	1.5	--	1.7	1.9	1.5	1.5	1.5	--	--	1.6	--	--	1.6	--	--	1.6
>= 4.5	2.1	3.0	2.3	1.9	--	2.1	3.2	1.6	1.9	1.6	--	--	2.1	--	--	1.8	--	--	2.1
Distribution of result values (Unknown) (%)																			
< 1.0	4.0	--	--	--	--	--	0.1	--	--	--	--	--	--	6.2	--	--	--	--	4.3
1.0-1.4	32.7	--	--	--	--	--	15.4	--	--	--	--	--	--	16.1	--	--	--	--	30.6
1.5-1.9	15.9	--	--	--	--	--	21.5	--	--	--	--	--	--	18.2	--	--	--	--	16.2
2.0-2.4	19.1	--	--	--	--	--	25.6	--	--	--	--	--	--	24.3	--	--	--	--	19.8
2.5-2.9	13.6	--	--	--	--	--	18.5	--	--	--	--	--	--	17.5	--	--	--	--	14.1
3.0-3.4	7.1	--	--	--	--	--	9.1	--	--	--	--	--	--	9.1	--	--	--	--	7.4
3.5-3.9	3.4	--	--	--	--	--	3.9	--	--	--	--	--	--	4.1	--	--	--	--	3.5
4.0-4.4	1.7	--	--	--	--	--	2.4	--	--	--	--	--	--	2.0	--	--	--	--	1.7
>= 4.5	2.4	--	--	--	--	--	3.5	--	--	--	--	--	--	2.6	--	--	--	--	2.4

**Table 17: Overview of Lipase Laboratory Test Results**

	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Distribution of Specimen Source (%)																			
Plasma	--	0.0	--	--	--	0.0	0.0	0.0	0.0	--	--	--	--	100	--	--	--	--	1.6
Serum	--	0.0	--	--	--	0.0	100	100	100	--	--	--	--	0.0	--	--	--	--	94.1
Serum/Plasma	--	0.0	--	--	--	0.0	0.0	0.0	0.0	--	--	--	--	0.0	--	--	--	--	0.0
Other	--	0.0	--	--	--	0.0	0.0	0.0	0.0	--	--	--	--	0.0	--	--	--	--	0.0
Missing	--	100	--	--	--	100	0.0	0.0	0.0	--	--	--	--	0.0	--	--	--	--	4.3
Distribution of Patient Location (%)																			
Outpatient	99.1	0.0	55.8	42.7	--	80.0	0.0	98.6	29.3	71.6	--	--	100	0.0	--	61.7	--	--	53.8
Inpatient	0.0	0.0	44.2	57.3	--	0.0	5.6	1.4	69.0	28.4	--	--	0.0	0.0	--	38.3	--	--	37.1
Unknown	0.9	100	0.0	0.0	--	20.0	94.4	0.0	1.7	0.0	--	--	0.0	100	--	0.0	--	--	9.1
Other	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Distribution of result units (%)																			
U/L	91.7	0.0	100	100	--	97.3	71.7	100	100	100	--	--	100	99.2	--	100	--	--	95.4
Unknown	0.0	0.0	0.0	0.0	--	0.0	28.3	0.0	0.0	0.0	--	--	0.0	0.8	--	0.0	--	--	1.7
Other	6.2	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	1.0
Missing	2.1	100	0.0	0.0	--	2.7	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	2.0
Distribution of result values (U/L) (%)																			
< 160	97.7	--	74.9	95.4	--	89.6	93.5	89.2	76.9	78.1	--	--	97.8	98.9	--	50.2	--	--	83.9
160-480	1.9	--	20.4	3.0	--	7.5	4.7	8.4	15.7	15.9	--	--	1.7	0.8	--	45.6	--	--	11.6
> 480	0.5	--	4.7	1.6	--	2.9	1.8	2.4	7.4	5.9	--	--	0.5	0.3	--	4.3	--	--	4.5
Distribution of result values (Unknown) (%)																			
< 160	--	--	--	100	--	--	97.4	--	75.0	--	--	--	--	99.1	--	--	--	--	97.4
160-480	--	--	--	0.0	--	--	2.0	--	25.0	--	--	--	--	0.9	--	--	--	--	2.0
> 480	--	--	--	0.0	--	--	0.6	--	0.0	--	--	--	--	0.0	--	--	--	--	0.6

**Table 18: Overview of Platelet Count Laboratory Test Results**

	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Distribution of Specimen Source (%)																			
Blood	100	0.0	100	100	--	0.0	100	100	100	100	--	--	100	100	--	100	--	--	98.0
Other	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	100	0.0	0.0	--	100	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	2.0
Distribution of Patient Location (%)																			
Outpatient	99.3	0.0	79.0	66.9	--	80.6	0.0	99.7	64.0	82.9	--	--	100	0.0	--	86.7	--	--	75.9
Inpatient	0.0	0.0	21.0	33.1	--	0.0	2.2	0.3	33.9	17.1	--	--	0.0	0.0	--	13.3	--	--	11.2
Unknown	0.7	100	0.0	0.0	--	19.4	97.8	0.0	2.1	0.0	--	--	0.0	100	--	0.0	--	--	12.9
Other	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Distribution of result units (%)																			
K/UL	2.8	0.0	100	100	--	79.8	69.4	100	100	100	--	--	100	0.0	--	100	--	--	71.2
Unknown	0.0	0.0	0.0	0.0	--	0.0	30.6	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	3.0
Other	0.2	0.0	0.0	0.0	--	19.0	0.0	0.0	0.0	0.0	--	--	0.0	99.9	--	0.0	--	--	1.4
Missing	97.0	100	0.0	0.0	--	1.2	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	24.4
Distribution of result values (K/UL) (%)																			
< 150,000	100	--	100	100	--	100	100	100	100	100	--	--	100	100	--	100	--	--	100
150,000-450,000	0.0	--	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
> 450,000	0.0	--	0.0	0.0	--	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Distribution of result values (Unknown) (%)																			
< 150,000	--	--	100	--	--	--	100	--	--	--	--	--	100	52.9	--	--	--	--	100
150,000-450,000	--	--	0.0	--	--	--	0.0	--	--	--	--	--	0.0	46.8	--	--	--	--	0.0
> 450,000	--	--	0.0	--	--	--	0.0	--	--	--	--	--	0.0	0.3	--	--	--	--	0.0

**Table 19: Overview of Pregnancy (Qualitative) Laboratory Test Results**

	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Distribution of Specimen Source (%)																			
Beta-Human Chorionic Gonadotropin (BHCG)																			
Serum	86.9	--	--	--	--	100	87.7	100	--	0.0	--	--	90.1	100	--	--	--	--	69.7
Urine	13.1	--	--	--	--	0.0	12.3	0.0	--	100	--	--	9.9	0.0	--	--	--	--	30.3
Other	0.0	--	--	--	--	0.0	0.0	0.0	--	0.0	--	--	0.0	0.0	--	--	--	--	0.0
Missing	0.0	--	--	--	--	0.0	0.0	0.0	--	0.0	--	--	0.0	0.0	--	--	--	--	0.0
Human Chorionic Gonadotropin (HCG)																			
Serum	33.5	42.7	1.7	8.4	--	61.4	19.8	0.0	33.7	--	--	--	1.2	0.0	--	0.0	--	--	20.8
Urine	66.5	57.3	85.0	91.6	--	38.6	80.2	100	66.3	--	--	--	98.8	100	--	100	--	--	77.5
Other	0.0	0.0	13.4	0.0	--	0.0	0.0	0.0	0.0	--	--	--	0.0	0.0	--	0.0	--	--	1.7
Missing	0.0	0.0	0.0	0.0	--	0.0	0.0	0.0	0.0	--	--	--	0.0	0.0	--	0.0	--	--	0.0
Distribution of Patient Location (%)																			
Beta-Human Chorionic Gonadotropin (BHCG)																			
Outpatient	98.9	--	--	--	--	0.0	0.0	99.2	--	94.9	--	--	100	0.0	--	--	--	--	94.4
Inpatient	0.0	--	--	--	--	0.0	2.5	0.4	--	5.1	--	--	0.0	0.0	--	--	--	--	1.3
Unknown	1.1	--	--	--	--	100	97.5	0.5	--	0.0	--	--	0.0	100	--	--	--	--	4.3
Other	0.0	--	--	--	--	0.0	0.0	0.0	--	0.0	--	--	0.0	0.0	--	--	--	--	0.0
Missing	0.0	--	--	--	--	0.0	0.0	0.0	--	0.0	--	--	0.0	0.0	--	--	--	--	0.0
Human Chorionic Gonadotropin (HCG)																			
Outpatient	97.9	--	83.0	75.1	--	89.7	0.0	99.4	77.7	--	--	--	100	0.0	--	85.3	--	--	79.7
Inpatient	0.0	--	17.0	24.9	--	0.0	17.7	0.5	20.9	--	--	--	0.0	0.0	--	14.7	--	--	16.4
Unknown	2.1	--	0.0	0.0	--	10.3	82.3	0.1	1.5	--	--	--	0.0	100	--	0.0	--	--	3.9
Other	0.0	--	0.0	0.0	--	0.0	0.0	0.0	0.0	--	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	--	0.0	0.0	--	0.0	0.0	0.0	0.0	--	--	--	0.0	0.0	--	0.0	--	--	0.0
Distribution of result values (%)																			
Beta-Human Chorionic Gonadotropin (BHCG)																			
Positive	7.3	--	--	--	--	18.7	6.4	9.3	--	7.9	--	--	6.6	--	--	--	--	--	7.5
Negative	92.7	--	--	--	--	81.3	93.3	90.3	--	92.1	--	--	93.2	--	--	--	--	--	92.4
Borderline	0.0	--	--	--	--	0.0	0.0	0.0	--	0.0	--	--	0.0	--	--	--	--	--	0.0
Unknown	0.0	--	--	--	--	0.0	0.3	0.5	--	0.0	--	--	0.3	--	--	--	--	--	0.1
Other	0.0	--	--	--	--	0.0	0.0	0.0	--	0.0	--	--	0.0	--	--	--	--	--	0.0
Missing	0.0	--	--	--	--	0.0	0.0	0.0	--	0.0	--	--	0.0	--	--	--	--	--	0.0
Human Chorionic Gonadotropin (HCG)																			
Positive	5.5	--	6.3	11.0	--	16.7	1.7	8.0	16.5	--	--	--	3.9	4.9	--	17.1	--	--	13.4
Negative	94.5	--	93.3	88.6	--	83.2	98.2	91.9	83.5	--	--	--	96.0	95.0	--	82.9	--	--	86.5
Borderline	0.0	--	0.4	0.0	--	0.1	0.1	0.0	0.0	--	--	--	0.0	0.0	--	0.0	--	--	0.1
Unknown	0.0	--	0.0	0.0	--	0.0	0.1	0.1	0.1	--	--	--	0.1	0.0	--	0.0	--	--	0.1
Other	0.0	--	0.0	0.4	--	0.0	0.0	0.0	0.0	--	--	--	0.0	0.1	--	0.0	--	--	0.0
Missing	0.0	--	0.0	0.0	--	0.0	0.0	0.0	0.0	--	--	--	0.0	0.0	--	0.0	--	--	0.0

**Table 20: Overview of Pregnancy (Quantitative) Laboratory Test Results**

	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total
Distribution of Specimen Source (%)																			
Beta-Human Chorionic Gonadotropin (BHCG)																			
Serum	100	--	100	--	--	100	100	--	100	100	--	--	100	100	--	--	--	--	100
Urine	0.0	--	0.0	--	--	0.0	0.0	--	0.0	0.0	--	--	0.0	0.0	--	--	--	--	0.0
Other	0.0	--	0.0	--	--	0.0	0.0	--	0.0	0.0	--	--	0.0	0.0	--	--	--	--	0.0
Missing	0.0	--	0.0	--	--	0.0	0.0	--	0.0	0.0	--	--	0.0	0.0	--	--	--	--	0.0
Human Chorionic Gonadotropin (HCG)																			
Serum	100	--	100	100	--	100	100	100	--	--	--	--	100	100	--	--	--	--	100
Other	0.0	--	0.0	0.0	--	0.0	0.0	0.0	--	--	--	--	0.0	0.0	--	--	--	--	0.0
Missing	0.0	--	0.0	0.0	--	0.0	0.0	0.0	--	--	--	--	0.0	0.0	--	--	--	--	0.0
Distribution of Patient Location (%)																			
Beta-Human Chorionic Gonadotropin (BHCG)																			
Outpatient	99.7	--	92.5	--	--	0.0	0.0	--	82.3	98.3	--	--	100	0.0	--	92.1	--	--	90.3
Inpatient	0.0	--	7.5	--	--	0.0	0.0	--	17.2	1.7	--	--	0.0	0.0	--	7.9	--	--	5.0
Unknown	0.3	--	0.0	--	--	100	100	--	0.5	0.0	--	--	0.0	100	--	0.0	--	--	4.7
Other	0.0	--	0.0	--	--	0.0	0.0	--	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	--	0.0	--	--	0.0	0.0	--	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	0.0
Human Chorionic Gonadotropin (HCG)																			
Outpatient	95.3	--	100	87.2	--	88.6	0.0	99.9	--	--	--	--	100	0.0	--	96.9	--	--	92.8
Inpatient	0.0	--	0.0	12.8	--	0.0	0.2	0.1	--	--	--	--	0.0	0.0	--	3.1	--	--	0.9
Unknown	4.7	--	0.0	0.0	--	11.4	99.8	0.0	--	--	--	--	0.0	100	--	0.0	--	--	6.3
Other	0.0	--	0.0	0.0	--	0.0	0.0	0.0	--	--	--	--	0.0	0.0	--	0.0	--	--	0.0
Missing	0.0	--	0.0	0.0	--	0.0	0.0	0.0	--	--	--	--	0.0	0.0	--	0.0	--	--	0.0
Distribution of result units (%)																			
Beta-Human Chorionic Gonadotropin (BHCG)																			
MIU/ML	0.0	--	98.8	--	--	99.9	86.7	--	99.8	100	--	--	97.1	100	--	100	--	--	60.7
Unknown	0.0	--	1.2	--	--	0.0	13.3	--	0.2	0.0	--	--	2.9	0.0	--	0.0	--	--	1.1
Other	12.7	--	0.0	--	--	0.0	0.0	--	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	4.9
Missing	87.3	--	0.0	--	--	0.1	0.0	--	0.0	0.0	--	--	0.0	0.0	--	0.0	--	--	33.3
Human Chorionic Gonadotropin (HCG)																			
MIU/ML	0.0	--	92.5	100	--	94.2	51.4	81.1	--	--	--	--	100	0.1	--	100	--	--	67.0
Unknown	0.0	--	7.5	0.0	--	0.0	48.6	0.0	--	--	--	--	0.0	0.2	--	0.0	--	--	2.4
Other	33.8	--	0.0	0.0	--	0.4	0.0	18.9	--	--	--	--	0.0	99.8	--	0.0	--	--	15.2
Missing	66.2	--	0.0	0.0	--	5.5	0.0	0.0	--	--	--	--	0.0	0.0	--	0.0	--	--	15.4
Distribution of result values (MIU/ML) (%)																			
Beta-Human Chorionic Gonadotropin (BHCG)																			
< 5	--	--	28.1	--	--	47.9	42.7	--	33.5	36.7	--	--	43.4	45.6	--	38.2	--	--	37.9
5-<50	--	--	13.9	--	--	6.3	6.6	--	18.9	18.3	--	--	7.7	9.6	--	9.4	--	--	13.6
50-<1000	--	--	24.1	--	--	12.2	13.3	--	16.5	14.9	--	--	13.9	16.6	--	16.5	--	--	15.6
1000-<10,000	--	--	17.6	--	--	14.4	12.6	--	14.5	12.8	--	--	12.9	14.5	--	15.2	--	--	13.9
10,000-<100,000	--	--	14.4	--	--	15.7	22.4	--	14.2	15.0	--	--	19.1	12.2	--	17.6	--	--	16.4
100,000-<200,000	--	--	1.6	--	--	3.1	2.3	--	2.1	2.0	--	--	2.7	1.4	--	2.8	--	--	2.3
>= 200000	--	--	0.2	--	--	0.5	0.3	--	0.2	0.2	--	--	0.4	0.2	--	0.3	--	--	0.3
Human Chorionic Gonadotropin (HCG)																			
< 5	--	--	0.0	26.3	--	2.1	20.8	25.9	--	--	--	--	0.1	0.0	--	24.3	--	--	14.4
5-<50	--	--	0.0	11.8	--	48.6	2.7	11.0	--	--	--	--	0.0	0.0	--	38.9	--	--	9.4
50-<1000	--	--	0.0	21.6	--	15.8	4.1	18.1	--	--	--	--	0.0	66.7	--	13.5	--	--	10.4
1000-<10,000	--	--	6.6	19.0	--	14.2	7.6	19.3	--	--	--	--	6.2	33.3	--	10.4	--	--	13.0
10,000-<100,000	--	--	92.5	18.4	--	15.7	60.2	22.7	--	--	--	--	89.9	0.0	--	10.5	--	--	49.9
100,000-<200,000	--	--	0.9	2.5	--	3.1	4.3	2.7	--	--	--	--	3.6	0.0	--	2.0	--	--	2.8
>= 200000	--	--	0.1	0.4	--	0.4	0.4	0.3	--	--	--	--	0.2	0.0	--	0.3	--	--	0.2

**Table 20: Overview of Pregnancy (Quantitative) Laboratory Test Results**

	DP1	DP2	DP3	DP4	DP5	DP6	DP7	DP8	DP9	DP10	DP11	DP12	DP13	DP14	DP15	DP16	DP17	DP18	Total	
Distribution of result values (Unknown) (%)																				
Beta-Human Chorionic Gonadotropin (BHCG)																				
< 5	--	--	0.7	--	--	--	48.6	--	100	--	--	--	39.7	--	--	--	--	--	45.3	
5-<50	--	--	25.5	--	--	--	7.9	--	0.0	--	--	--	7.7	--	--	--	--	--	7.7	
50-<1000	--	--	31.3	--	--	--	14.7	--	0.0	--	--	--	18.0	--	--	--	--	--	16.2	
1000-<10,000	--	--	23.7	--	--	--	14.1	--	0.0	--	--	--	14.3	--	--	--	--	--	13.6	
10,000-<100,000	--	--	17.7	--	--	--	12.9	--	0.0	--	--	--	16.8	--	--	--	--	--	14.5	
100,000-<200,000	--	--	1.0	--	--	--	1.6	--	0.0	--	--	--	3.0	--	--	--	--	--	2.3	
>= 200000	--	--	0.1	--	--	--	0.1	--	0.0	--	--	--	0.6	--	--	--	--	--	0.4	
Human Chorionic Gonadotropin (HCG)																				
< 5	--	--	0.3	0.0	--	--	0.1	--	--	--	--	--	--	75.0	--	--	--	--	0.2	
5-<50	--	--	85.9	0.0	--	--	5.2	--	--	--	--	--	--	12.5	--	--	--	--	27.2	
50-<1000	--	--	13.7	0.0	--	--	8.1	--	--	--	--	--	--	0.0	--	--	--	--	9.6	
1000-<10,000	--	--	0.1	100	--	--	6.2	--	--	--	--	--	--	0.0	--	--	--	--	4.5	
10,000-<100,000	--	--	0.0	0.0	--	--	79.3	--	--	--	--	--	--	12.5	--	--	--	--	57.6	
100,000-<200,000	--	--	0.0	0.0	--	--	1.1	--	--	--	--	--	--	0.0	--	--	--	--	0.8	
>= 200000	--	--	0.0	0.0	--	--	0.0	--	--	--	--	--	--	0.0	--	--	--	--	0.0	

**Table 21: Number of Members with Laboratory Test Results, by Test Type and Year**

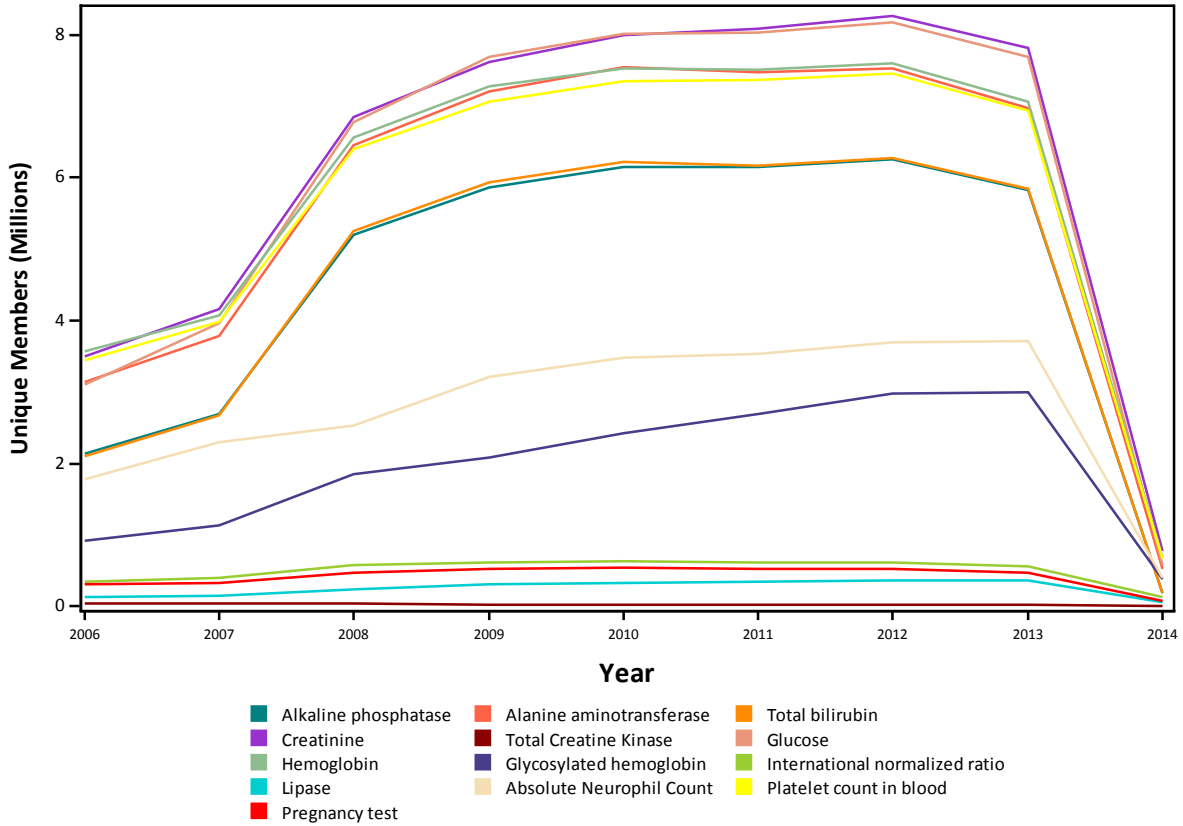
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Number of members with laboratory test results (Millions)	24.5	29.7	49.2	55.4	58.2	58.6	59.8	56.2	4.6
Alkaline phosphatase	2.1	2.7	5.2	5.9	6.2	6.2	6.3	5.8	0.2
Alanine aminotransferase	3.1	3.8	6.5	7.2	7.5	7.5	7.5	7.0	0.5
Total bilirubin	2.1	2.7	5.3	5.9	6.2	6.2	6.3	5.8	0.2
Creatinine	3.5	4.2	6.8	7.6	8.0	8.1	8.3	7.8	0.8
Total Creatine Kinase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Glucose	3.1	4.0	6.8	7.7	8.0	8.0	8.2	7.7	0.6
Hemoglobin	3.6	4.1	6.6	7.3	7.5	7.5	7.6	7.1	0.7
Glycosylated hemoglobin	0.9	1.1	1.9	2.1	2.4	2.7	3.0	3.0	0.4
International normalized ratio	0.3	0.4	0.6	0.6	0.6	0.6	0.6	0.6	0.1
Lipase	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.1
Absolute Neutrophil Count	1.8	2.3	2.5	3.2	3.5	3.5	3.7	3.7	0.4
Platelet count in blood	3.4	4.0	6.4	7.1	7.4	7.4	7.5	6.9	0.7
Pregnancy test	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.1



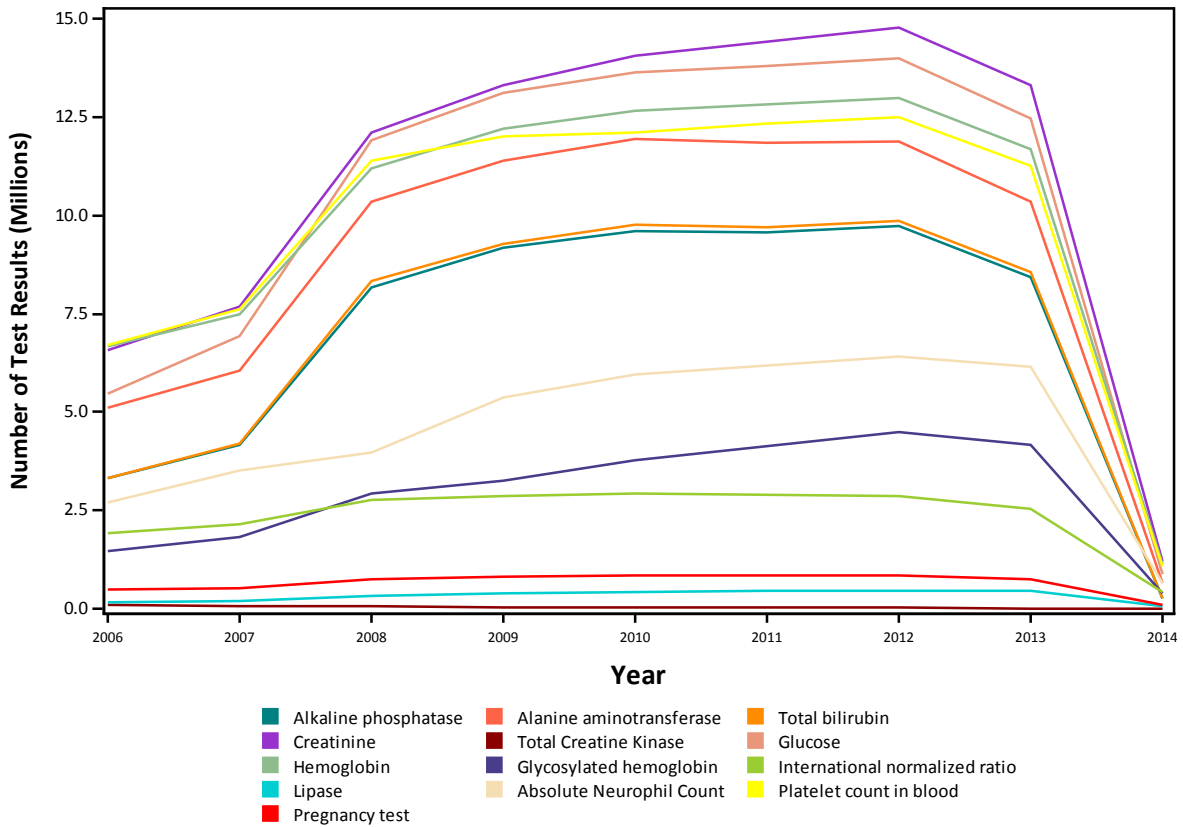
**Table 22: Number of Laboratory Test Results, by Test Type and Year**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Number of members with laboratory test results (Millions)	44.0	52.5	84.3	93.3	97.7	99.0	100.8	90.2	7.2
Alkaline phosphatase	3.3	4.2	8.2	9.2	9.6	9.6	9.7	8.4	0.3
Alanine aminotransferase	5.1	6.1	10.3	11.4	12.0	11.8	11.9	10.4	0.7
Total bilirubin	3.3	4.2	8.3	9.3	9.8	9.7	9.9	8.6	0.3
Creatinine	6.6	7.7	12.1	13.3	14.1	14.4	14.8	13.3	1.2
Total Creatine Kinase	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Glucose	5.5	6.9	11.9	13.1	13.6	13.8	14.0	12.5	0.9
Hemoglobin	6.7	7.5	11.2	12.2	12.7	12.8	13.0	11.7	1.1
Glycosylated hemoglobin	1.5	1.8	2.9	3.3	3.8	4.1	4.5	4.2	0.4
International normalized ratio	1.9	2.1	2.8	2.9	2.9	2.9	2.9	2.5	0.4
Lipase	0.2	0.2	0.3	0.4	0.4	0.5	0.5	0.5	0.1
Absolute Neutrophil Count	2.7	3.5	4.0	5.4	5.9	6.2	6.4	6.1	0.7
Platelet count in blood	6.7	7.6	11.4	12.0	12.1	12.3	12.5	11.3	1.1
Pregnancy test	0.5	0.5	0.7	0.8	0.9	0.9	0.8	0.8	0.1

**Figure 16: Number of Members with Laboratory Test Results by Test Type and Year**



**Figure 17: Number of Laboratory Test Results by Test Type and Year**



**Table 23: Number of Unique Members and Unique Records per Mini-Sentinel Distributed Database Table**

	Unique members (in Millions)	Unique records (in Millions)
Enrollment	182.4	243.5
Demographic	182.4	182.4
Dispensing	95.2	4,431.9
Encounter	141.5	5,092.5
Diagnosis	141.4	10,191.8
Procedure	141.2	12,270.4
Death	3.9	3.9
Cause of Death	0.9	2.6
Laboratory Results*	30.9	682.8
Absolute Neutrophil Count (ANC)	13.5	41.1
Alkaline Phosphatase (ALP)	21.7	62.7
Alanine Aminotransferase (ALT)	24.4	79.9
Total Bilirubin	22.0	63.5
Total Creatine Kinase (CK)	2.6	6.5
Creatinine	25.5	97.7
Glucose		
Fasting	7.0	18.4
Random	22.9	74.1
Hemoglobin	26.1	89.1
Glycosylated hemoglobin (HgbA1c)	8.7	26.6
International Normalized Ratio (INR)	2.8	21.4
Lipase	1.9	3.0
Pregnancy		
BHCG		
Qualitative	0.6	1.0
Quantitative	1.2	2.5
HCG		
Qualitative	1.0	2.2
Quantitative	0.2	0.3
Platelets	25.6	87.2
Vital Signs	25.6	--
Height	9.0	127.5
Weight	9.5	188.8
Systolic Blood Pressure	9.2	310.1
Diastolic Blood Pressure	9.2	310.1

\*Unique members and unique record count for Laboratory Results table includes records for all tests.

**Table 24: Mini-Sentinel Distributed Database At-a-Glance**

Number of members in MSDD (millions)	182.4
Person-years of observation time (millions)*	333.5
Members currently enrolled, accumulating new data (millions)*	39.9
Members with over 3 years of data (millions)*	41.4
Total dispensings (billions)	4.4
Dispensings per month (millions)	47.2
Unique encounters (billions)	5.1
Unique inpatient stays (millions)	49.9
Encounters per month (millions)	58.2
Members with at least one laboratory result value (millions)	30.9

\*Represents time enrolled in medical and drug coverage.